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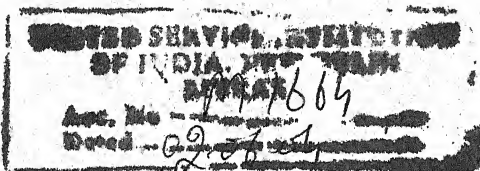
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PROTECTION IN WAR

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PROTECTION IN WAR.

Chapter I.

THE UNREADINESS OF FORCES.

IN war there is an inherent unreadiness in every force, which arises from the independent will power of the adversary. This may be small or great, but we can never afford to regard it as a negligible quantity. The more the leader's will dominates that of his opponent the higher the degree of readiness which he can gain in this respect, but the most inert enemy is nearly certain to act in a manner which will tend to render imperfect the best preconceived arrangements for his defeat. It may become necessary, even in this case, to alter plans and dispositions, and the power to do so should be retained. But we cannot count on having to contend against an opponent who is inferior in will power to ourselves. He may be approximately equal or superior to us. Our inherent unreadiness then becomes greater, and the retention of the power to change more important.

Our dispositions, either in attack or defence, are made so as best to meet a certain variety of possibilities. They are not completely ready to meet what will actually happen, but they are probably more so than if we had disposed our force on the assumption that the enemy could only act in one particular manner.

In strategy time and space are great, and the alterations required in our dispositions may have to be on a corresponding scale. As the rival forces approach each other, and we arrive within the domain of tactics, plans and dispositions have a tendency to become more matured and fixed, and the possibility to change is more limited. But even in battle there is still a feeling of the way, and a gradual working up to the launching of the final blow, which irretrievably commits the assailant. A commander should know how to safeguard his liberty of action, in spite of this inherent unreadiness, and how to appreciate the moment at which he can cast away such caution, and strike with his utmost force and determination.

There can be no doubt that this form of unreadiness is nearly always much greater in the defensive than in the offensive.

The movement of forces introduces another form of unreadiness, which we may also regard as unavoidable. Except for a short distance, in an open country, a force cannot move in a fighting

formation. If it attempted to do so, the distance which it could cover would be very small, and the fatigue of all ranks excessive. The obstacles encountered would rapidly destroy the formation, and any change of direction would be practically impossible. Hence a force is compelled to move by roads, being strung out into a long, thin column. When the length of this column would be excessive, the force is broken up into several columns, on roads which are approximately parallel to each other. The distances which separate these roads will seldom correspond to the dispositions which we may wish to make for battle. The greater the distance, which we desire to cover, the more limited will be the number of roads suitable for our march. The delay and fatigue, resulting from the use of indifferent roads, in a long march, is very great. Therefore we have an unreadiness in breadth and depth, which will generally increase with an attempt to move a long distance in a short time.

Although our opponent suffers from the same class of unreadiness, there is no reason why it should be the same in amount. If he advances to meet us, with an equal activity, the network of roads may be more or less favourable for him, and his readiness for battle may be greater or less than our own. If he is content with a smaller degree of activity, he can use more roads, and thus be more ready. If he remains stationary, he

can assume a very high degree of this sort of readiness, but he will then give us the necessary time to lay aside our own unreadiness before we attack. But although we may know that the enemy is halted, there is no certainty that he may not suddenly become active, and, as it were, spring on us, being in a higher state of this class of readiness than ourselves.

There can be little doubt that if we regard the defensive, not as something inert, but as a form of waiting to spring on the opponent, it has the advantage in this type of readiness.

Closely connected with this unreadiness of movement is the unreadiness which results from the necessity of keeping a force supplied with all its wants. If an army has to live on the country, which may be the case when it is of comparatively modest dimensions, according to a modern standard, the larger the area it covers, the greater will be the facility of supply. We must evidently spread out in order to live, and this dispersion will nearly always be greater than what is suitable for battle dispositions, so that we have to concentrate to fight, and can only remain in this concentrated form for a short time. The enormous requirements of great modern armies, not only in food, but in war materials, make them dependent on railways to an extraordinary extent. They cannot move far from them, and there will be a tendency to concentrate into groups on the dif-

ferent lines, which are in working order. Such local concentrations may be excessive for battle dispositions, but the distance apart of the groups may constitute an undesirable dispersion of the forces regarded as a whole.

It is evident that in this form of unreadiness our opponent may greatly differ from ourselves. In the majority of cases the side acting on the defensive will have an advantage in this respect.

Rest is necessary to both man and beast, but without shelter they will not gain the full benefit of it. A distribution of units, in order to use existing shelter, entails a serious disturbance of dispositions suitable for battle, generally requiring excessive dispersion, but, occasionally, a local congestion. Rest of itself is clearly a relaxation of readiness. Combined, they constitute a serious source of unreadiness.

" The offensive is no homogeneous whole but incessantly mixed up with the defensive The attack cannot be continued uninterruptedly up to its conclusion, it must have stages of rest, and in these stages, when its action is neutralised, the state of defence steps in of itself. . . . During the twelve hours rest, which usually succeeds a day's work what a difference there is between the defender in his chosen, well-known, and prepared position, and that of the assailant, occupying a bivouac into which, like a blind

man, he has groped his way."—Von Clausewitz, Book VII. Ch. II.

Though our opponent is under the same necessity of periodically relaxing his readiness to obtain rest, this need not be to the same amount, and he is free to choose a different time to do so. During such a period of relaxation of readiness, unless precautions are taken, the more ready enemy has it in his power to arrange the position of affairs, and make his less ready adversary accept his will, or in other words, he can gain the initiative. It is not sufficient for the leader of the force, the readiness of which has been relaxed, to resume his former degree of readiness. He must adopt a far higher one. He must not only make the most suitable movements to counter what the enemy has succeeded in doing during his own relaxation of readiness, but, above all, he should be able to act in such a manner as to assert his own independent will power.

The moral inferiority of a force, with respect to the loss of initiative, may be slight and of a very temporary nature. With proper arrangements the unreadiness arising from it can be quickly laid aside. It may, however, be so great that a leader if he joins battle at once, must do so at a great disadvantage, and he may therefore prefer to postpone a battle with his opponent, in the hopes of being able to fight under better conditions later on. There can be no doubt that loss of both moral

and initiative are in many cases recoverable to a great extent, as the enemy is by no means always able in practice to press his advantage as strenuously as he should theoretically speaking. Readiness to avoid a battle may thus occasionally be of as much importance to us as readiness to engage in battle. A common example of this takes place when we have been defeated in battle.

Though we may possess a high degree of readiness with respect to our main objective, our condition may be one of unreadiness towards a second hostile force, and we can only gain a high degree of readiness to deal effectually with it, after we have obtained a favourable decision with the main objective. We must evidently employ some means of eliminating the second force, till the first decision is reached.

There is an unreadiness which is due to inferiority in organisation. At the beginning of a war armies have to be mobilised and concentrated, and, until these operations are complete, there is an obvious state of unreadiness, which is dangerous to us in proportion as the enemy mobilises and concentrates more rapidly than ourselves. After an unsuccessful battle, an army is usually much disorganised, and, even apart from its moral inferiority, it is not in an immediate condition to recommence the struggle.

Thus, whether we are acting on the whole offensively or defensively, we are always liable to come

into contact with an opponent who is more ready than ourselves, which may lead to very serious consequences, unless we possess a means of preventing it.

Our first requirement is evidently time, so that we can lay aside our unreadiness, and assume a degree of readiness equal, and, if possible, superior to that of our opponent. But to change in this manner will nearly invariably entail an alteration in our dispositions, and for this we need a free zone between ourselves and the enemy, for our manœuvre may have to be made in a forward direction. Hence we require space as well as time.

There is a great tendency among many military writers to place their principal reliance on information, in order to gain these factors. A certain system of obtaining information, not only of the enemy's dispositions but also of his plans, combined with a sure and instantaneous transmission of reports, would doubtless go far towards the securing of the necessary time and space. It would lead to the best countermove of which a leader was intellectually capable, and which the conditions allowed, being always employed against every move of the opponent. His relaxation of readiness and its resumption could be made to correspond with those of the enemy. But the unreadiness, due to the moral and intellectual faculties, would still remain. War would become in many ways like the game of chess, in which the

mind can work in the clear medium of certainty.

The principal thing, which militates against any such perfection, is that each commander uses all possible means at his disposal to prevent the opponent's gaining information. Secrecy is maintained on all important points, and spies are very summarily treated when discovered. Every endeavour is made, by the use of force, to keep hostile reconnoitring troops at a distance. The general result is that the information gained is limited to what refers to the dispositions of the screen, which is keeping off hostile reconnaissance, and everything behind it remains practically unknown. In some places, doubtless, enterprising patrols may penetrate the screen, and gain some information concerning the masses which are hidden behind it, but reports will not reach headquarters for a very considerable time. Even when force is used, in the form of a large cavalry mass, to tear aside the screen, and reconnoitre the larger bodies, the results which we may fairly expect, as will be seen later, are not great.

In practice the transmission of information, even with the assistance of the latest inventions, such as wireless telegraphy, is subject to delay, uncertainty and inaccuracy. Means of rapid transmission will usually be limited to the larger reconnoitring bodies, and patrols will only be in a position to use mounted or dismounted messengers, who may be intercepted or lose their way.

Such information as is received is often inaccurate, misleading and contradictory.

Under favourable circumstances, when unopposed, flying machines have proved themselves to be extraordinarily rapid in gaining good information, and they will doubtless eventually become the best reconnoitring agents that an army can use. War conditions will, however, make it necessary for them to fly far higher than they have done in peace manœuvres, thus rendering observation more difficult. It is also certain that measures will be taken, not only to improve the means of shooting them down, but also to oppose them in their own element by other flying machines. As reconnoitring agents flying machines have their limitations, and there is no reason to believe that they will ever be able to supply sufficiently accurate and detailed information to ensure the time and space, which are necessary for us, in order to lay aside our unreadiness, although they may go a certain distance in this direction.

The more the subject is studied, either theoretically or historically, the more certain will it become that information alone cannot generally give the necessary time and space for the assumption of a high degree of readiness.

Of course the distance separating the rival forces may be such that we are justified in concluding that the enemy cannot avail himself of our relaxation of readiness to manœuvre so as to

make it impossible for us to regain our liberty of action before he strikes. The certain information that he is at such a distance will be sufficient to counteract our unreadiness. But when we consider how uncertain and incomplete information must be, and that the striking distance is a very elastic conception, we shall do well, when in the slightest doubt, to protect ourselves by some means in addition to that of information.

Except very rarely, we cannot hope to know the enemy's intentions, and, even if we do ascertain what they were at some previous time, it must be remembered that they are subject to change.

In the great majority of cases, information concerning hostile dispositions, however accurate and valuable, has reference to a condition of affairs which existed at a considerable interval of time, although flying machines will, without doubt, greatly reduce this interval. The further away the enemy may be when our information is gathered, the more subject to change are his dispositions, before we come in contact with him, and hence the greater the changes which may have to be made in our own. All good information is valuable, but what we particularly want for battle is information when the enemy is close to us, and is committed to a line of action. But this proximity to us militates against our obtaining the necessary time and space to lay aside our unreadiness, unless we can arrest his progress.

To solve this problem an additional factor of security, besides time and space, is introduced, namely force,—that is a buffer or resisting body between our unready masses and the possibly more ready ones of the enemy.

Chapter II.

THE MEASURE OF UNREADINESS.

It appears essential to enter somewhat more fully into the question of the unreadiness of forces, and to endeavour to arrive at an estimate of the delay which the buffer or protective guard must gain, in order that a leader may be able to lay aside his unreadiness. The case of a force in movement will be considered first.

It is quite probable that the information gained, before the protective guard comes in contact with the enemy, will have enabled the leader to form certain plans, and make certain dispositions roughly suitable for the coming battle, but the final elaboration of these will often greatly depend on the information gained by the protective guard after its influence begins to affect the adversary seriously. It is possible that the protective guard may have to fight or be ready to fight for some time before the leader can evolve a very considerable portion of his battle plan. This may constitute a material part of the total delay which the protective guard has to gain, but it is almost impossible to give an estimate of its amount. If the leader is still in great doubt on a number of points,

this delay may be great, but, if his previous information has been good, and the enemy is limited as regards his methods of action, it may be quite small.

It is evident that we must not allow this endeavour, namely, only to act with a full knowledge of the conditions, to destroy our offensive spirit. If we wait too long to find out what the enemy is going to do and what his exact dispositions are, before we act, we shall inevitably end in losing the initiative altogether. The use of the offensive necessitates the adoption of a plan of action, which, though founded on a knowledge of the hostile dispositions at the time it was made, must, to a certain extent be independent of what the enemy will do from that time till it is applied. By this plan we hope to control the opponent's dispositions, making them conform to our own, and we must have confidence that it will do so. It is most important that our plan, provided it is a good one, should be started before any offensive plan of our adversary, otherwise there will be a tendency for us not to control but to be controlled. On the other hand, the earlier our plan is made the less likely is it to be suitable to the state of affairs which will actually exist when it is used, and the greater the possibility of the opponent's acting in such a manner as to render it abortive. Information is always most valuable, but we must not allow a search for it to paralyse our action. When

we have the necessary will and readiness to strike, it is evidently foolish to continue to hesitate in front of the enemy, waiting for additional information which is to be obtained from the engagement of a protective guard. But we must remember that however great our desire for offensive action, it does not ensure to us the necessary readiness. Our plan may be the ruling factor in our dispositions but it must not be of such a rigid nature as not to be susceptible of being adapted to the situation as it is developed.

The movement of a large army is necessarily carried out by using the good roads, which run more or less parallel to each other in the required direction. The allotment of units, such as army corps or divisions, to the different available roads, is made in such a manner that the army can most rapidly and surely lay aside the unreadiness of the march formation, for one which is suitable for battle. As a general rule, experience has shown, and theory proves, that the more nearly the disposition of the whole army approximates to a square, the more easily and quickly can its formation be changed, in order to meet the average requirements necessitated by the approach and action of the enemy. The configuration and resources of the country, the network of roads and railways, and what is known of the enemy, may naturally lead to a modification in this arrangement, such as a greater or less number of units on

certain roads. The tendency to act on a "pre-conceived plan" will also render an unequal allotment of units to roads highly probable. For our present purpose, however, it may be accepted that the average disposition will closely approximate to a square.

It has been calculated that in central Europe good roads, suitable for the advance of an army, in a given general direction, are to be found at seven to ten miles apart, on an average, but we must be prepared for much greater intervals in mountainous or thinly populated countries. Besides such main roads, there are generally a large number of inferior roads, leading in every direction, which can be used for short distances, in deployments for battle and in battle itself.

The road spaces required by units in the German army, which may be taken as a type, are as follows :

Infantry division—fighting units	. 7 miles
Infantry division—2nd line transport and bridge train	. 2 miles
Army corps—fighting units	. 14 miles
Army corps—2nd line transport and bridge trains	. $4\frac{1}{2}$ miles
Army corps—1st echelon ammunition column and trains	. $4\frac{1}{2}$ miles
Army corps—2nd echelon ammunition column and trains	. $6\frac{1}{4}$ miles
Army corps—complete, with intervals	. 33 miles

Motor transport will undoubtedly reduce several of these distances.

From this it will be seen that an army, the main body of which consists of four army corps, advancing by four roads, will occupy an average space of twenty-five by thirty-three miles. With more army corps, or if the roads are further apart, it may be necessary to have two army corps on at least some of the roads. Here the depth would be twenty-eight miles for the fighting portions and sixty-six miles for the whole.

Now whatever manœuvre may be executed for battle it is necessary for the columns to deploy sooner or later. Provided always that there is sufficient time available, a column will be usually deployed more or less at right angles at its head, or in advance of it. This will take for the fighting portion of an army corps five or six hours, and for two army corps, more than double that time, provided the trains, etc., of both follow the 2nd army corps. An entire army corps will take twelve or thirteen hours to deploy, and two army corps on the same road will take nearly two days.

If a column deploys backwards on the tail of the column, the time will be theoretically the same. If the deployment is on the centre of the column, the time will be halved.

The time required for deployment is thus a known quantity, as it must vary directly with the depth of the column.

This is a class of unreadiness which is generally more pronounced, when we are acting offensively than when we are on the defensive.

A leader, in order to throw off his necessary unreadiness, must usually execute a manoeuvre to regain his freedom of action, that is to prevent the enemy dictating the situation. It is of course possible that he has so arranged his columns that, when they simply deploy to the front, they are in a suitable position for battle without loss of freedom, but as the information on which he has had to rely for their arrangements must necessarily have been gathered at a previous time, when the enemy's plans were probably not developed, this is most unlikely. A manoeuvre will usually consist of a lateral displacement of a material portion of the army, either to concentrate, if the columns are too far apart, to spread out, if they are too close, to be ready to strike the enemy's flank or some particular portion of his front, or to form a reserve till the development of the fight has sufficiently cleared up the situation to allow of its being used to the best advantage for a decisive blow. As the action of the protective guard will tend to start the battle in advance of the line of the heads of columns, a forward displacement of at least some of the columns will also be necessary.

Though not necessarily the case, the extent of this combined displacement in manoeuvring to regain freedom of action, when opposed to an army

of approximately equal frontage, generally varies directly with the extent of the frontage of the whole army, and with the distance of the protective guard, which forms a pivot on which the manœuvre is, as it were, centred. Its value in time can only be approximately fixed for any given set of conditions, and then alone by that "tact of judgment" which should be the distinguishing feature of an able leader. It is possible that good information, previously obtained, may assist in forming an idea of what it is likely to be, but, in any case, it is necessary to make a generous allowance for it in establishing the means for securing the necessary delay.

When we are carrying out an offensive plan of action and still have the will to act offensively, combined with the necessary readiness, the manœuvre we must make with the main body will generally be of a simple character. It will tend more to a correction or oscillation in our dispositions than to an extensive rearrangement.

But deployments and manœuvres must be preceded by the preparation and issue of orders to all concerned. On receipt of the important information, which is to lead to a battle, the leader will be faced most probably with a condition of affairs for which he is not fully prepared. He has to consider the situation and how he can act, not only to counter it, but to retain his freedom of will power in the coming battle. Everything depends

on his clear-sightedness and resolution. Assuredly he will not take the momentous and irretrievable step of engaging his whole army without devoting a little time to the deepest thought. Even with the most far-seeing and careful arrangements beforehand much has to be weighed and considered. He must form a clear mental picture not only of existing conditions but of what may be the state of affairs when his orders reach their destination, for example, a column which may be twenty miles distant. In peace manœuvres there is generally far too much hurry in doing this, and, consequently, the time really required on service is greatly underestimated. It may be stated, however, that, if good orders are ready in an hour, it will indicate great powers of concentration and determination.

When acting offensively on a preconceived plan, the orders issued for the march may cover, to a great extent, the necessary action of the different columns should the enemy be encountered, and subsequent orders may be very limited or altogether unnecessary, provided no unexpected development of a serious nature should occur.

The difficulty of the rapid transmission of orders by technical means in a moving force is very great indeed. All the best and most up-to-date means of technical transmission must be utilised, but they have their limitations, and are never so quick in practice as in theory. The setting up of wireless telegraphy material may only take half an

hour, but there is no certainty that the similar installation at the other end is ready to receive the message. An ordinary field telegraph or telephone system is very apt to fail at the critical moment, and there is generally considerable delay in delivery. The power of the heliograph is dependent on weather and suitable country. All may fail and the message must go by orderly. Happy the commander-in-chief who has at his disposal a sufficiency of aeroplanes for this work!! With such a variety of means and their uncertainties, the time a message takes to reach its destination must always remain a very doubtful quantity.

On receipt of an order the commander of a corps has to consider its contents, compose his own orders, and transmit them back along his column to his subordinate commanders, possibly for twenty miles or more. The divisional generals have to take similar action. The time for the consideration of the situation and the issue of orders, down to and including the divisional generals, will probably alone amount to two hours. This time may be doubled when the allowance for transmission even by technical means is added. As the size of the army increases the number of hands through which orders have to pass increases with it. The larger the army the greater the distances involved and the larger the number of lines of communication. Hence the greater the probability of mis-

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takes and interruptions, and the greater the time required, even with the best forms of technical intercommunication.

If the manœuvre is to the front, time can often be saved by allowing a column to continue its march or to assemble at its head, during the preparation of orders and their transmission, and it is for this reason that a deployment to the front is quicker than one to the rear end of the column.

It is in the very nature of war that things go wrong and that misunderstandings, interruptions and accidents occur. They all mean delay before an order can be carried out. An increase in numbers implies an increase in this general friction.

We thus see that for an army in movement time must be allowed for the following factors, which constitute the necessary unreadiness :—

1. Information.
2. Deployment.
3. Manœuvre.
4. Orders.
5. Friction.

It is now necessary to examine how these factors may vary in the case of an army at rest.

1. *Information.*

There appears to be no reason why this should differ to any marked extent.

2. *Deployment.*

When an army is considered not to be in imme-

diate danger of coming into collision with a serious fraction of the enemy, it is often convenient, and saves unnecessary fatigue, to find shelter for it in towns and villages throughout the entire length of the columns. When collision becomes more and more probable, the columns are proportionately closed up on their heads, spreading out on either side of the road for shelter. In extreme cases the columns are closed on their heads and bivouac there within a small area.

When there are two army corps on the same road, it is possible, when the days are long, to close up the rear one for the halt to half a day's march behind the front one, by making it start its march a suitable number of hours after the leading army corps has done so.

By this closing up on the front the time required for deployment can be correspondingly reduced as it is in itself a partial deployment but the ultimate deployment must take place near the head of the column and not at a considerable distance from it, as would be the case if a serious displacement for manœuvre were necessary. Even then much time will be saved, if the unit can march across country, more or less massed, or a sufficient number of secondary roads are available for movement in several columns. On the other hand this closing on the front and spreading out to gain shelter introduce some new elements of delay.

Men and horses have to be got ready to march

and baggage, etc., has to be packed up and loaded. Small units have to fall in and march to the assembly place of larger units. Except in bivouac the larger units are necessarily out of their proper order and somewhat mixed up, as the requirements as regards shelter are different for mounted and dismounted troops. Though this extra delay decreases with the habituation to war of the army, it will be seldom less than two hours for an army corps at the commencement of a campaign.

3. *Manœuvre.*

Under similar circumstances, the time required for the combined displacement of a column will be practically the same as when the army is moving.

4. *Orders.*

The time required for the preparation of orders remains the same, but that for transmission will be less than when the army is moving. It is evident that it is much easier to establish technical means of communication in a stationary force, and that the transmission is facilitated and ensured. The delivery of messages is easy and rapid. It is unlikely to take even half the time it does on the march.

5. *Friction.*

This will remain much the same as on the march.

Hence a force when resting may require somewhat less time to get rid of its necessary unreadiness than when in movement. This gain of time

will vary with the amount of closing up of the columns. It must, however, be remembered that in many climates bivouacing causes a great wastage in men and horses, and that the closing up towards the head of the columns, and then the spreading out to seek shelter for considerable distances on either side of the line of march, entail a large amount of extra exertion on the part of the troops, especially if the march has to be continued the next day by the same roads.

The more this question of the necessary unreadiness is considered, the plainer it becomes that the time required to lay it aside varies directly as the size of the army. In a great army, consisting of many army corps, it may amount to several days, and the difficulty of gaining this time has undoubtedly led to the adoption by several writers of the "preconceived idea," that is that the main lines of a great army's action must be settled beforehand, and cannot be altered, and that the dispositions thus settled, and a most uncompromising offensive, must be made to dominate the enemy's will power to such an extent that they must create the situation, and nothing the enemy can do should be regarded as necessitating material alterations.

In all operations there must be a certain amount of this "preconceived idea," especially in the offensive. The delay required from the protective guard will be lessened the more of it we introduce

into our calculations, but the greater is the danger we incur of meeting with an unexpected situation and having to suffer the consequences.

The question of the time required to lay aside necessary unreadiness has here only been referred to the simplest cases of movement and rest, so as to arrive at an appreciation of the means for securing the necessary delay. When an army is first concentrating after mobilisation, far more delay may have to be secured. When armies are in very close contact, the securing of delay may be impossible and a sacrifice of freedom of action becomes necessary. These and other cases will be dealt with later, as we progress in the consideration of the whole question of protection.

Chapter III.

OFFENSIVE AND DEFENSIVE ACTION.

As will be seen later, it may often be necessary to use a protective guard offensively, but its role, as a whole, is essentially of a defensive nature.

Its defence may be stationary or consist in a fighting retirement. In both it gains its power, as a delaying agent, principally through the superiority in strength of the defensive over the offensive form of action.

No military question has led to such divergence of opinion as this superiority. At the present time nearly every book of military regulations, in all countries, lays down the obligation of adopting the offensive at practically any cost. The offensive spirit, when applicable, is admirable in itself, and appeals naturally to all soldierly instincts, but there is a distinct danger in excessive insistence on the universal adoption of the offensive, namely that a true conception of the real nature of war will be rendered difficult and unpopular.

In no branch of war, perhaps, is it so necessary to be able to appreciate the real strength of the defensive, and to profit by its proper application,

as in that of protection. It constitutes the very essence of the protective idea.

Von Clausewitz, in his great work "On War," has dealt exhaustively with the matter, and it may be said to be the foundation of his teaching. That his arguments are not appreciated is often due to the fact that those who disagree with him fail to grasp what his conception of the defensive really is. He definitely states that absolutely passive defence is impossible and a negation of war. The idea of warding off the blow refers only to our original attitude.

"A swift and vigorous assumption of the offensive—the flashing sword of vengeance—is the most brilliant point in the defensive ; he who does not at once think of it at the right moment, or rather, he who does not from the first include this transition in his idea of the defensive will never understand the superiority of the defensive as a form of war."—Book VI. Ch. v.

He thus describes the tactical defence :—

"This it has done in recent wars by keeping its forces concentrated in large masses, the greater part not deployed, and, where possible, concealed, thus merely taking up a position in readiness to act according to the measures of the enemy as soon as they are sufficiently revealed. This does not preclude a partially passive defence of the ground ; its

advantage is too great for it not to be used a hundred times in a campaign. But that kind of passive defence of the ground is no longer the principal affair: that is what we have to do with here.”—Book VI. Ch. II.

He argues that it is a well known fact that preserving is easier than acquiring, the reason being that all time which is not turned to any account falls into the scale in favour of the defence. “He reaps where he has not sowed.” Every suspension of offensive action, either from erroneous views, from fear or from indolence, is in favour of the side acting defensively. The defensive has to employ fewer means, and it has to suffer less wear and tear.

“If the offensive form were the stronger there would be no further occasion ever to use the defensive, as it has merely a negative object, everyone would be for attacking and the defensive would be an absurdity. On the other hand, it is very natural that the higher object should be purchased by greater sacrifices.”
—Book VI. Ch. I.

Von Clausewitz considers the relative advantages possessed by attack and defence in tactics, as regards the following three factors, which lead to success in battle :—

1. Ground and locality.
2. Surprise.
3. Attack from several directions.

He maintains that the first factor is entirely in favour of the defence, and few will be prepared to contradict this. He further holds that in the last two factors, the defence, from its better concealment has some advantage. This doubtless is much more open to objection, but we must look on the defensive battle as he has described it, namely a defensive full of the power and will to pass over to the offensive when the right time comes, with as able and experienced a commander as the enemy, and with troops as numerous and as good, a large portion of which can be sent wherever required. We naturally, somehow, assume that there must be some great initial inferiority about the side on the defensive, because we generally find that this is the case in war, but we must remember that Von Clausewitz does not try to prove that an inferior force on the defensive is necessarily stronger than a superior one on the offensive. He never recommends the defensive for general adoption, though he recognises its occasional necessity.

“If the defensive is the stronger form of conducting war, but has a negative object, it follows of itself that we must only make use of it so long as our weakness compels us to do so, and that we must give up that form as soon as we feel strong enough to aim at the positive object.”—Book VII. Ch. I.

The advocates of the superiority in strength of the offensive include many most distinguished

soldiers and writers, and it is necessary to consider carefully the arguments put forward by them.

The great moral factors inherent in the offensive will outweigh all advantages of the defensive, if such really exist. There is a moral inferiority about the defensive, which will adversely affect all ranks from the highest to the lowest, while the fighting powers of the attacking side will be increased in proportion. The will power of the defender is subservient to that of the attacker. He takes action only to resist what the attacker does. He thus, according to the modern way of expressing it, loses the initiative.

Von der Goltz in "The Nation in Arms," though granting many advantages to the defence, maintains that "the idea of the greater strength of the defensive is, in spite of all, based on an illusion." His able summing up of the case against Von Clausewitz's views is as follows:—

"To counterbalance, however, all these disadvantages, the attack possesses in a much higher degree than the defence, the capacity of exciting to action all the intellectual and moral forces of an army. This qualification explains how it happens that the former scores the greater number of final successes. The attacker proceeds from the first in clearer consciousness of the object in view. He chooses a certain aim, and his intellectual forces are thus guided into a definite groove. His in-

telleet becomes productive as if by force of circumstances. Much is gained by the mere fact that the attack incites greater energy than the defence ; for of two opponents, equal in other respects, the more active will be the victor.

The defender awaits the blow in order to parry it. He must observe the enemy and order his own action by that of the other. It is impossible for him to feel the same stimulating impulse as the enemy, who thereby becomes the controlling factor. The consciousness of this fact will speedily and surely pervade the masses, and work wonders. The bearing of an army which is pressing forward is vastly different from that of a retreating or even of a waiting army. The spirit of enterprise is aroused, and the attack gives it a scope quite different from that of the defence. The former sets a much greater number of active factors in motion. Success in attack has a double signification. A successful defence merely proves that the enemy was at the moment not the stronger party, but the successful attack proves conclusively that the attacker is actually the stronger.

Psychological elements are of equal influence in war as material ones. If we conceive a situation in which danger is apprehended, without our knowing when it will occur, we

shall also understand the position of an army acting on the defensive, while awaiting the onslaught of the enemy. The defensive lacks the elements of impulsion. It fetters its forces instead of fostering them ; it is apt to force upon the soldier the feeling that the army and its commanders are controlled by the situation, instead of controlling it. . . .

It is a fateful difference, that the defender is only victorious when he wins at all points, while the attacker triumphs if he gains the upper hand in a single spot."

If we carefully study this summary, however, it appears that a defensive, such as Von der Goltz here so graphically describes, and the weakness of which he brings out, is quite a different defensive to that which Von Clausewitz tells us is the stronger form of making war.

Von Caemmerer, in "The Development of Strategical Science," particularly urges the reader to do Von Clausewitz the justice of trying to understand things exactly as he means them to be understood, and he thinks it absolutely necessary to side with Von Clausewitz, though that writer has not, perhaps, given sufficient weight to the moral influences inherent in the offensive in the opening engagements of a war, before an army has gained the great moral factor of knowing it can beat its adversary.

It is not at all clear why modern improvements

and inventions should favour the attack, as several writers have tried to prove. Frontal attacks on a good and strongly held position are certainly not more frequently successful than they used to be. If modern arms fire further, both sides make use of this improvement ; if they fire quicker the defence has certainly the advantage of a much easier ammunition supply. Improved methods of intercommunication are more easily applied to the defence than to the attack. Flank attacks have always been and always will be dangerous to the defence, if proper measures are not taken to counter them. The great range of modern weapons has unquestionably made it possible to bring a greater superiority to bear on a flank than was formerly the case, provided the defence allows such an attack to be developed unopposed. The greater distances which flank attacks have to cover to gain a flank, without previously coming under fire, render their execution slower and more difficult. Aeroplane reconnaissance will make it harder to surprise an enemy by decisive strokes on flanks or elsewhere. It will be easier to hide from flying machines troops at rest than troops in motion.

It is strange that in all the arguments on this question so little reference is made to its connection with protection.

Few of the advocates of the offensive at any price, have maintained that protective bodies should always assume the offensive, which would

be the only justifiable tactics, if the offensive is the stronger form.* Every book of military regulations assumes that, as a general principle, they should act defensively when opposed to superior forces. In fact it may be said that this defensive attitude is brought forward too much. What confidence, then, can the commander of a protective body have in his defensive action, if he is educated to believe that the offensive is the stronger form? No doubt the conditions which render the defensive form the stronger are, in the case of protective bodies, very clear, namely that it is a temporary expedient with the object of gaining time, leading to an eventual change to the offensive—the sword of vengeance—and that it is the preparation which causes the enemy to use, on a fraction of our army, an excessive portion of his troops, so that the rest of our army, when it attacks, will be resisted by a lesser free force.

It is most necessary that the commander of every protective body should fully realise the strength of the defensive, and use it with skill and confidence.

* Colonel de Grandmaison in his "Deux Conférences," 1911, urges an uncompromising offensive for protective guards.

Chapter IV.

PROTECTIVE DISPOSITIONS.

THE evolution of a practical working system of protection from the purely theoretical conception would appear to take place in the manner which will now be explained.

A force (Plan 1) A safeguards its necessary unreadiness by sending or radiating outwards, in what are considered the dangerous directions, protective guards B . . . B. Each of the protective guards B . . . B similarly secures itself in the dangerous directions, by radiating outwards smaller protective guards C . . . C. This process is continued till the protective guards E . . . E become extremely small but so close to each other that nothing can pass between them undetected. Any one protective guard, together with all the protective guards thrown out from it, constitutes a unit.

The strength of the protective guards decreases in geometrical progression as we go outwards from A, and the guard of origin should be as great or greater than the sum of the guards it pushes out.

If the guards are composed of the same arm, the

distances AB, BC, CD and DE decrease as we go outwards, as the power of resistance and hence the time a guard can be left unsupported diminishes with its size.

The whole system when required moves with the force A, and every unit is dependent for its position on the situation of A.

The protective guards E, furthest from A, are the "eyes" of the system, as they must be the first to detect the approach of any hostile body. They perform the duty of what is called protective reconnaissance.

If the hostile body is very small, such as a reconnoitring patrol, the protective guards E can deal with it. If larger, E, while gaining time by resistance, warns D which, if strong enough, can deal with it, or if not, while resisting, warn C, and so on through B to A. There is thus a gradual increase of resisting power as A is approached, and this is brought into play in proportion to the strength of the hostile attack. The force A, and each guard in turn, is undisturbed unless the attack is so strong as really to require their intervention.

This theoretical protective arrangement is equally applicable whether the force A is in movement or at rest, but the difficulties of its application, and the consequent variations, which must be introduced, differ considerably in the two cases.

Such a protective arrangement must be able to move with A, and do its work at such a pace as

not to delay A more than can be avoided. It is at once evident that no network of roads, however dense, will permit of all the numerous protective guards using them, and still maintaining their relative positions. Only some of them will be able to do so. For example the roads X Y may allow the force A and the guards B . . B, with their smaller guards C . . C, lying directly in front of them, to maintain their relative dispositions approximately. The remainder of the protective guards, though sometimes able to find roads to move on, would have frequently to march across country. Obstacles would be constantly met with, detours would have to be made, and great delay would result.

The small protective guards E, which are furthest from A, have not only to advance and keep a sharp look out, but must examine the whole of the ground between them, so that hostile parties cannot hide themselves in order to break through.

The toil and delay resulting from this in a close country are very great indeed, even for a mobile body, such as cavalry. The hostile bodies which endeavour to penetrate this protective screen will, at any rate to begin with, be composed of cavalry, and these would be able to pass between infantry guards unless they were most lavishly employed. It is evident that means must exist for catching such hostile patrols.

Again, the transmission of information across

country by means of infantry is very slow. In all these cases great mobility is required, for which infantry is unsuitable and must be replaced by cavalry or mounted infantry, whenever this is possible.

The proportion of mounted troops in an army is necessarily limited, and they can only be used for such protective purposes with the greatest economy, being required according to common opinion for more important tasks. Hence the protective guards which can conveniently maintain their dispositions approximately, while keeping to the roads, will dispense with cavalry and mounted infantry, which will be employed as economically as possible to form those protective guards which cannot use roads or advance without making long detours and often have to move across country.

Now this division of work between the cavalry and infantry, if literally applied to the theoretical disposition, would lead to several disadvantages. The cavalry and infantry units would be much mixed up. There would be little possibility of a good system of command in the cavalry, extending to all its parts. Cavalry and infantry have different requirements and different degrees of mobility, and a constant and close connection is equally irksome to both. Hence a system is adopted which, though theoretically objectionable, is found expedient in practice. Instead of the

chain of command in the sector E A E, (Plan 1) gradually rising from E E to A, it is interrupted. The guards within E D D E, viz. the cavalry and horse artillery, possibly combined with mounted infantry or other quickly transported infantry, are placed under a single commander and the guards within C B B C, viz. the infantry, field artillery and engineers, under another commander. Both commanders may be directly under the commander of the whole force A, the system usually adopted in our service, or the commander of E D D E may be under the commander of C B B C, which would be the case, even in our service, when the protection is employed against a force other than that forming the principal objective.

The extra mobility of the cavalry allows the intervals and distances, between the different guards composed of this arm, to be largely increased. This also applies to their distance from the supporting infantry guards. Thus, though still dependent as regards situation on the position of the force A, this cavalry portion of the protective screen, called by us the protective cavalry, gains a desirable amount of elasticity in its movements. Its pace can, within limits, be independent of that of the infantry protective guards. It can be pushed further ahead so that protective information can be gathered at a greater distance. It can advance by "bonds successifs" or "springs," from one position or line to another which is suit-

able for protective observation. Its separate organisation makes it ready to carry out any special task requiring its concentrated action, such as quickly seizing a desired position, or for forcible tactical reconnaissance. There is more certainty that the horses will be well cared for, as regards both food and shelter, which is a most important point.

As the interval between this protective cavalry and the infantry guards may be thus very considerable, it is advisable to have a small amount of cavalry with the infantry protective guards for close protective reconnaissance and intercommunication. This is taken from what we call the divisional cavalry.

Thus we arrive at a scheme of protection (Plan 2), when infantry and cavalry are combined to perform this duty. We must regard it only as a foundation for protective work, as the conditions under which it is used will greatly influence the dispositions.

Referring to the theoretical disposition of a protective force, (Plan 1) we find that the protective guards are so arranged and so constituted as regards strength, that the stronger is always able to aid the weaker, and that there is a gradual increase of resisting power as the main body A is approached. Now if this graduated harmony of force, time and space is extensively interrupted by the elimination of a series or several series of

guards of the same degree, (viz. B C or D), what is called a cordon system results. The consequences of adopting such a system may be seen easily from a very simple example.

The force A (Plan 3) wishes to protect its necessary unreadiness in the dangerous direction 1, 2, 3, 4, 5, and it can spare sixteen units for this duty. Sixteen units are sent to B to constitute a guard there.

The sixteen units at B send four units to C₁ and four units to C₂, retaining eight units at B. The four units at C₁ send one unit to D₁, and one unit to D₂, retaining two units. The one unit at D₁ has to defend the front 1, 2, and the one unit at D₂ the front 2,3. Similarly for the front 3,4, 5. If the enemy attacks the front 1, 2, the one unit at D₁ may be strong enough to drive it away, but, if not, little assistance can be expected at first from the one unit at D₂ as, if that unit quitted its front 2, 3, the enemy could penetrate the screen there by another force. The one unit at D₁ can only expect immediate aid from the two units at C₁. The resisting power within the area 1, B, 2, till the eight units at B intervene, may thus be three units and, if the whole front 1, 2, 3, is attacked, it will be four units within the area 1, B, 3. The one unit at D₂ cannot allow itself to be isolated, if the enemy drives back the one unit at D₁, but must retire, keeping within its area 2, B, 3. The resistance offered by units within one or both

areas will be under one commander. The eight units at B will remain undisturbed, unless the enemy's attack is strong enough to overcome four units. The commander of the two units at C₁ has the choice of assisting either or both of the units at D₁ and D₂. He also has the power to manoeuvre against the hostile force, probably somewhat disorganised in his attack on them. Two of the units in the area 1, B, 3, viz. those at C₁, are fully warned and have time to get ready for action. They cannot be easily surprised, but their intervention may surprise the enemy.

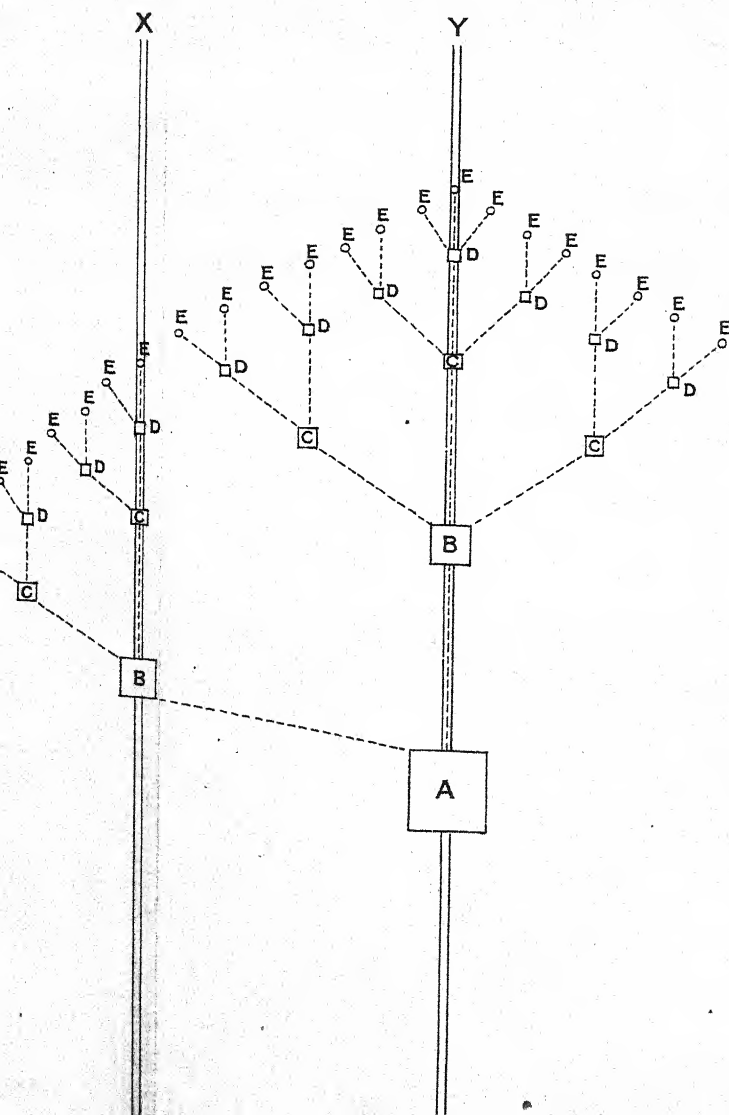
The sixteen units at B (Plan 4) send two units each to D₁, D₂, D₃, and D₄, which have to defend the fronts 1.2, 2.3, 3.4, and 4.5 respectively. If the enemy attacks the front 1.2, the two units at D₁ may be strong enough to drive him away, but, if not, little assistance can be expected from the two units at D₂, as, if those units quitted their front 2.3, the enemy could penetrate the screen there by another force. The two units at D₁ can only expect support from the eight units at B, which is a long way off, and this will lessen their moral resisting power. The resisting power within the area 1, B, 2, till the eight units at B intervene, can only be two units, and that within the area 1, B, 3, can only be four units, which will be under two independent commanders, and remain separated. The eight units at B will be disturbed, if the enemy's strength is enough to overcome two

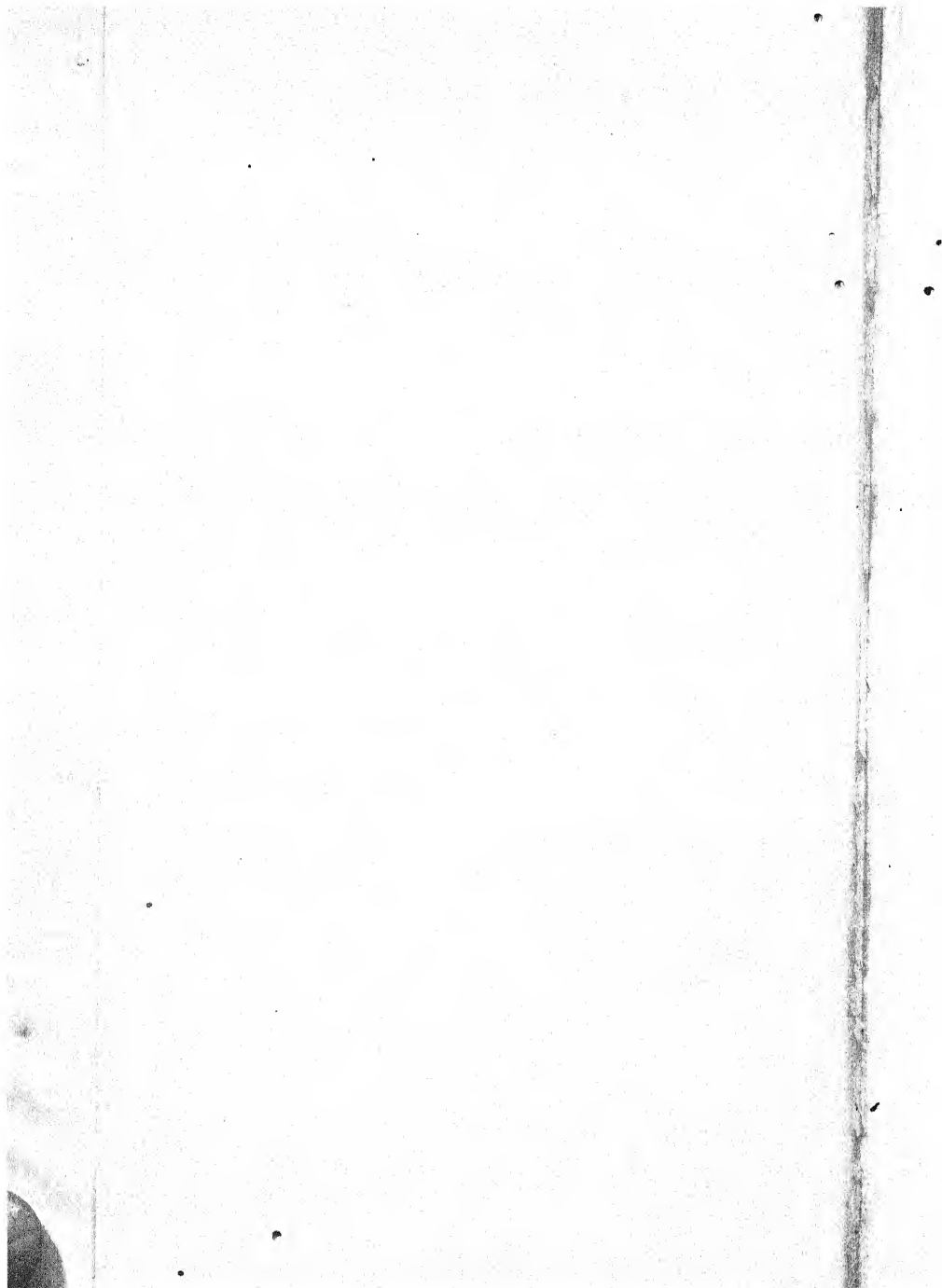
units. The two units at D₁ and D₂ can be more easily surprised than if they were protected by outer guards. There is no manœuvring body till the eight units at B are reached. It will be harder for the enemy to start the penetration of the screen, as he at once meets with greater opposition than in the first case, viz. two units instead of one, but, as he progresses, no increase of opposition is met with till the eight units at B intervene.

Now, if the protective guard at B, is also eliminated in the second case, it can easily be seen that the disadvantages are further increased, even though the strength of the guards D₁, D₂, D₃ and D₄ is proportionately increased, viz. to four units each.

In the cordon system there is a tendency for the line of protection to be equally strong and equally weak everywhere. The ideal of the successive application of force according to the necessities of any particular case is partially or wholly lost. It is wasteful for similar protective strengths, as the forces holding the portion of the line not attacked and which are therefore useless for resistance, form a larger proportion than is necessary or advisable. The readiness of guards should increase as we radiate outwards, so that only the minimum force has to suffer the inconvenience of constant readiness, and the maximum can enjoy, at least, a partial amount of convenience and rest. In the cordon system an unnecessary proportion

PLAN I.





is thus harassed. Similarly the main body has to be kept in a heightened state of readiness, as it can be disturbed by a smaller hostile attack. The guards D1, D2, D3 and D4 though strong in themselves are dangerously exposed to surprise and will suffer morally from their isolation, and will not gain as much time, by their resistance, for the main body as in a system of constantly reinforced resistance.

If an attempt is made to get over this isolation by diminishing their distance, the body they protect has not enough time to get ready and no space in which to manœuvre before the enemy arrives near it.

As will be seen later a cordon system is sometimes unavoidable, for example when no room is available for a better arrangement, and it must then be regarded as a necessary evil. For many minds it has and always has had a kind of fascination, which probably arises from the saving of effort in its preparation, and from a disinclination to surrender anything in order to gain big results. It is a system suitable against partisan and smugglers.

Chapter V.

ACTION OF THE PROTECTIVE GUARD.

As the object of a protective body is to delay, not an inferior or equal, but a greater hostile force, the primary condition of the combat in which it engages is that it will generally have to be conducted against superior numbers. It is highly advisable that the result of this combat, or series of combats, should not be of a nature to render the protective body unfit subsequently to be used in action, that is the delaying action must not be prolonged to such an extent that the protective body is routed and quite demoralised before the arrival of assistance. Though it commences before the rest of the army can come into play, this delaying action should be capable of being prolonged till the main body supports it, directly or indirectly ; it must not constitute, strategically, a separate engagement but must form the introduction to the main battle, if such is contemplated.

Infantry has, under normal conditions, great difficulty in retaining the power of retiring in good order, once the hostile infantry has reached a distance from it at which rifle fire is very effective,

namely about 1000 yards. If the defence infantry retires but does not reply to hostile fire from closer ranges, the advance of the enemy and, with it, the advance of the effective fire zone, will be unchecked, and it is a well established fact that the suffering of losses, without the power to reply, is particularly demoralising, even for a limited period. If the defence infantry does reply to the hostile fire the pace of retirement is lessened, and it will not be able to escape from the effective fire zone which will keep pace with the retirement.

Thus if the infantry of a protective body actually employs its fire to check the enemy after this distance is reached, there is a marked tendency for it to become "fixed" to its defensive position and unable to retire further except with serious loss of order and moral.

This tendency to "fixing" is much less marked in the case of artillery, which is able to employ hidden and covered positions, to destroy at much greater distances, and to use its mobility to escape quickly from a dangerous position.

The great mobility of cavalry, in like manner, gives that arm facility in escaping from being "fixed."

The commander of a protective body must always bear in mind this danger of being "fixed," as it must profoundly influence the methods in which he can endeavour to secure the necessary delay.

This delay can be obtained in two ways. Firstly by a stationary combat, and secondly by a fighting retirement, neither of which necessarily precludes a resort to offensive action, when the conditions are favourable. If the distance of the protective body from the main body, and the existing conditions, such as moral, numbers, strength of position, etc., permit of the conclusion that it can maintain its position, without excessive expenditure of fighting efficiency, till the arrival of help, direct or indirect, from the main body, the necessary maximum space and time for the main body to lay aside its unreadiness, in its fullest meaning, can probably be best secured by the former method.

If the prospect of being able to hold out till the arrival of support is bad, the latter method will generally be adopted, and will secure the maximum of time and space for the main body without the sacrifice of the protective guard. There are cases when this sacrifice is necessary in order to avert a still greater disaster to the main body, but the commander of a protective guard must remember that the destruction of the fighting efficiency of his command is always a serious blow to the army as a whole. Measures of a heroic nature are usually much less called for than those resulting from a sound, skilful and cautious judgment.

If a stationary combat is adopted, and the protective body is once "fixed," it can seldom be changed to a fighting retirement. On the con-

trary, a fighting retirement can, at any time, be changed to a stationary combat, and the skill of the commander will be shown in the selection of the time and place for doing so.

The time gained by a stationary combat depends on many considerations, and it is only possible to give a few of the general factors which enter into the calculation.

With the same odds against it, the larger the force the longer it can hold out, for the larger the hostile force the more unwieldly it becomes and, as has been already seen, the longer it takes to manœuvre it into contact with its opponent. For example, one army corps, when opposed to three army corps, will thus gain more time than one battalion opposed to three battalions. Again the relative space available for the attack on a small force is much greater than for one on a large force. It is an easy matter to arrange three or four companies in an attack on one company so that they are all using their utmost means, but on the contrary it is extremely difficult to develop the whole strength of three or four army corps against one army corps. This particularly applies to a protective force as, knowing it will be soon supported, it can often ignore movements threatening its retreat. Hence the rapidity with which a force can be overwhelmed by no means increases as quickly as the odds against it.

The closer a force is to support the more stub-

bornly will it fight. The conviction that assistance is close at hand renders unimportant those minor hostile advantages, which, when support is far distant or cannot be relied on, appear as decisive.

The fighting efficiency of a protective body, its moral, the strength, natural and artificial, of its position, and the ability of the commander as shown in his dispositions, all increase the time it can hold out. The assailant, unless his information is exceptionally good, is faced with much which is unknown. He cannot tell how long it will be before assistance will reach his adversary, or even what forces are already arrayed against him. He will probably feel his way, and take time to make contact. He will be naturally disinclined to disturb his general dispositions more than he can avoid, yet he must generally do this, if he desires to outflank the opposing force, so as the easier to drive it back. The units carrying out such outflanking movements are themselves apt to be taken in flank, and will move cautiously. But not only will the columns immediately engaging the protective body be delayed but this delay will extend to the other columns on either side, for, if they continue to advance, the line of battle is broken.

Von Clausewitz, writing more than eighty years ago, in speaking of the duration of the combat in general, says, as the result of war experience :—

“ Even the resistance of an ordinary division of 8,000 to 10,000 men of all arms, even opposed to an enemy considerably superior in numbers will last several hours, if the advantages of the country are not too preponderating, and, if the enemy is only a little, or not at all, superior in numbers, the combat will last half a day. A corps of three or four divisions will prolong it to double the time ; an army of 80,000 or 100,000 to three or four times.”—Book IV. Ch. VI.

The commander of a protective body, as well as all ranks, know that they may expect support, direct or indirect, sooner or later, from the main body, so that their resistance is likely to be protracted longer than would be possible in the case of an independent force, the commander of which has always to think of securing his retirement, if defeated. Now with every allowance for special conditions, the latest great wars prove, beyond doubt, that improvements in modern weapons have had a marked tendency to prolong the combat ; especially in the case of very large forces.

Taking all these points into consideration, it does not appear unreasonable, even with the great superiority which a protective force may encounter, if we expect, with some confidence, that, under average conditions, a division will be able to hold out in a stationary combat for half a day and an army corps for a day and a half. This

estimate must be increased or decreased as the special conditions, already brought to notice, are favourable or unfavourable.

A fighting retirement* gains time in the following manner : Before the enemy can attack a hostile protective guard which bars its way, some reconnaissance, in addition to what has taken place before the main contact, will often appear necessary to the commander, and this will entail delay. If the position taken up by the protective guard is good, its artillery will command the lines of approach to it for some three miles. At this distance the heads of the enemy's columns will be taken under fire by batteries in covered positions. The situation has to be considered and orders issued. Except where the ground is favourable, further advance must be preceded by the deployment of the infantry which is to attack, and the artillery must be brought into action to endeavour to neutralise the hostile guns. Little or nothing is to be seen, and this task will be long and difficult. Meanwhile the infantry of the attack has to quit the roads, and move forward across country, possibly for over two miles, harassed by the

* A few modern writers, totally obsessed by the offensive idea, maintain that a fighting retirement is a purely theoretical method of procedure, and that it has become impossible in practice. This view seems to admit of nothing between victory and a disorganised flight. It appears to be totally opposed to all experience, even in the latest wars, and it is probably one of those exaggerations which such writers openly admit as justifiable in order to instil into their readers the supreme necessity of adopting the offensive under every conceivable condition of affairs.

opponent's artillery, or as much of it as can escape neutralisation. When the position is approached it is found to be abandoned. The troops are necessarily somewhat disorganised, new orders have to be issued and march formations resumed. The advance is then continued, only to find the way once more blocked, and the same performance has to be reacted. If the enemy, tired of such delays, endeavours to rush a position, he may find that the protective guard now intends to fight it out in a stationary combat, and perhaps assistance has reached it ; a severe check is likely to be the result.

This uncertainty as to when the protective guard will stand and fight, instead of again retiring, affects the outflanking arrangements which may be made by the enemy. If the outflanking bodies wheel inwards to attack, there is much unnecessary loss of time and extra fatigue, if the protective guard has retired from its position. If they continue a direct advance, without halting, so as to be certain of striking the protective guard in flank at some later time, or of cutting it off altogether, the latter may halt to fight it out. The enemy's general line of battle will be broken, and liable to be attacked in detail by the opponent's main body, towards which the uninterrupted advance of the wings will have carried them. In any case the manœuvre of the outflanking bodies requires much time, as they must move in from at least three or

four miles beyond the flanks of the protective guard to nearly the centre of that body before their action is altogether decisive. The distance of the roads, which can be used by the outflanking columns, may greatly increase the extent of this concentric march. A superior cavalry will doubtless assist this endeavour to outflank the protective guard, and decrease the delay caused by it, but there is no certainty, or even probability, of such superiority, for, in accordance with modern methods of employment, the strength of the cavalry, working in conjunction with a protective guard, will frequently be quite independent of the strength of that body, and will depend on that of the whole army, and there is no question here of any difference in numbers of the two armies.

This is not the place to describe in detail the action of the protective guard in a fighting retirement. It is sufficient to state that it requires a thorough knowledge of the ground, over which the retirement has to be made, and of the successive positions, which have to be occupied; clear and comprehensive orders, issued in good time; a fine judgment of the moment at which the retrograde movement is to take place, so as to avoid getting "fixed," to a position, while securing the maximum amount of delay; and finally, troops which have been trained to this class of work.

The successive positions occupied should be at

such a distance as to compel the enemy to revert to the order of march, after he finds a position abandoned. The same deployment should not serve to carry on the attack up to the next position occupied by the protective guard.

As in the case of the stationary combat, many factors influence the delay, which can be thus secured.

The fact that the enemy does not know whether a real stand will be made or not by the protective guard, makes it generally necessary for him to employ superior numbers against it. Hence, as before, the delay will increase with the forces employed.

The enemy cannot reduce the delay by increasing his superiority in odds, as regards infantry, as the offensive power of that arm has not time to come into play in an efficient manner. On the contrary extra numbers will increase delay on account of their own unwieldiness. On the other hand the greater fire effect—the result of a superiority in odds as regards artillery—will undoubtedly decrease the delaying power of the opponent's artillery, but the employment of artillery, apart from the unit to which it belongs, causes confusion, and we must, at least partially, place against this gain the extra delay in the manœuvring of a larger artillery force.

As already stated it is not generally possible to ensure any given superiority in odds in the matter

of cavalry, though such superiority, if obtainable, will decrease delay.

Now the further a protective guard is from support, the more the feeling of isolation is prevalent, and the greater the anxiety arising from the fear of getting "fixed" to a position. This will lead to a tendency to be on the safe side, and to abandon a position before it is really necessary, thus diminishing the delay which might be caused. As support becomes closer, a feeling of confidence will undoubtedly tend to make the protective guard hold on longer, for, even if it is "fixed," it need not despair of receiving assistance, although this may not be the original idea of the leader.

The total actual time gained by a protective guard is the time it takes, at an ordinary marching pace, to cover its distance from the main body, plus the extra time gained by its delaying action as described above. Hence the further it is away from the main body, the more the total time gained, even though the extra time gained by its delaying action is less at a great distance than at a smaller one.

Von Clausewitz estimates this delay, which can be gained, as follows :—

"A division of 10,000 or 12,000 men, with a proportion of cavalry, a day's march of fifteen to twenty miles in advance in an ordinary country, not particularly strong, will be able to detain the enemy (including time occupied

in the retreat) about half as long again as he would otherwise require to march over the same ground ; but, if the division is only five miles in advance, then the enemy ought to be detained about twice or three times as long as he otherwise would be on the march.

Therefore, supposing the distance to be a march of twenty miles, for which usually ten hours are required, then from the moment the enemy appears in force in front of the advanced body we may reckon on fifteen hours before he is in a condition to attack our main army. On the other hand, if the advanced guard is posted only five miles in advance, then the time, which will elapse before our army can be attacked, will be more than three or four hours, and may very easily come up to double that, for the enemy still requires just as much time to mature his first measures against our advanced guard, and the resistance offered by that guard, in its original position, will be greater than it would be in a position further forward."—Book v. Ch. VIII.

The great range of modern guns, and their ability to use covered positions, have considerably increased their delaying power, because the enemy has to deploy at a much greater distance, and to advance for a longer time under artillery fire, and his artillery has greater difficulty in neutralising the opponent's guns.

Delay is also probably increased by the modern methods of employing nearly all the cavalry in advance of an army, so that the enemy will have no certainty or even probability of being able to employ a superiority in this arm against the protective guard.

Hence it would not appear to be an excessive estimate if we maintain that, in the case of a protective guard, at fifteen or twenty miles distance from the main body, under average conditions, there will be a gain over the ordinary march time of 75% for a division and 100% for an army corps. If the distance is half the above the percentage of gain will be doubled.

But in any calculation of the time a protective guard will gain by a fighting retirement, it is essential to allow for the necessary forward displacement required for the manœuvre of the main body (Ch. ii). In certain cases it will thus become necessary to restrict the fighting retirement to a portion of the distance separating the protective guard and the main body. At the end of this the retirement must cease, and a stationary combat take place.

Now there are two factors which tend to alter the amount of delay, which can be gained by a protective guard in both a stationary combat and a fighting retirement. These are the physical condition of the rival forces, and the time of day, when they meet.

After a long march the physical energies of the personnel of a protective guard will be nearly or wholly exhausted. If it then comes into contact with an enemy who has been resting, and whose physical energies are consequently unimpaired, it will be at a serious disadvantage. The length of time it can hold out in a stationary combat, if the enemy attacks at once, will be greatly diminished, and, if its main body has made a similar march at the same time, it will be much longer before it can expect assistance. A fighting retirement, which always requires the greatest exertions, will be almost out of the question, and, if attempted at once, will be, nearly inevitably, disastrous. It is evident that a leader must most carefully avoid placing his command in such an unfortunate position.

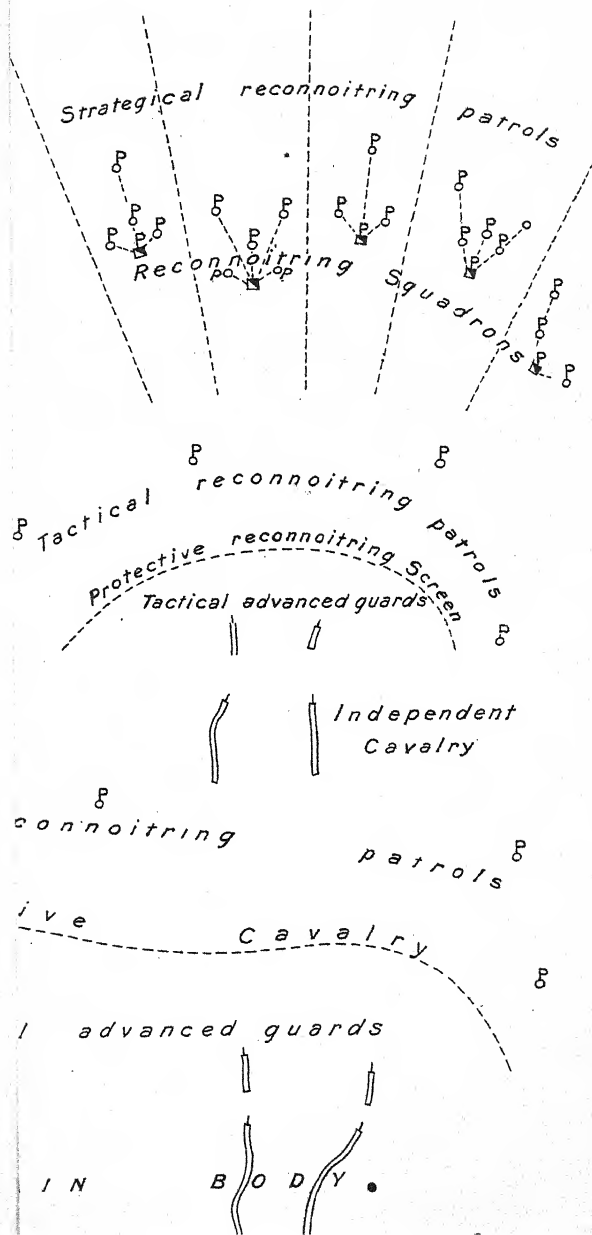
If, on the contrary, the protective guard is fresh and the enemy exhausted, when contact is made, much greater delay can be secured in a stationary combat, as the time taken by the enemy to rest before attacking will be so much actual gain, and will allow of the position being artificially strengthened. If he attacks when exhausted there will be little trouble in defeating him. These relative conditions of the opponents will often present an opportunity for a protective guard to assume the offensive with great advantage. If the policy of the commander is to make a fighting retirement, it will hardly be possible for the enemy

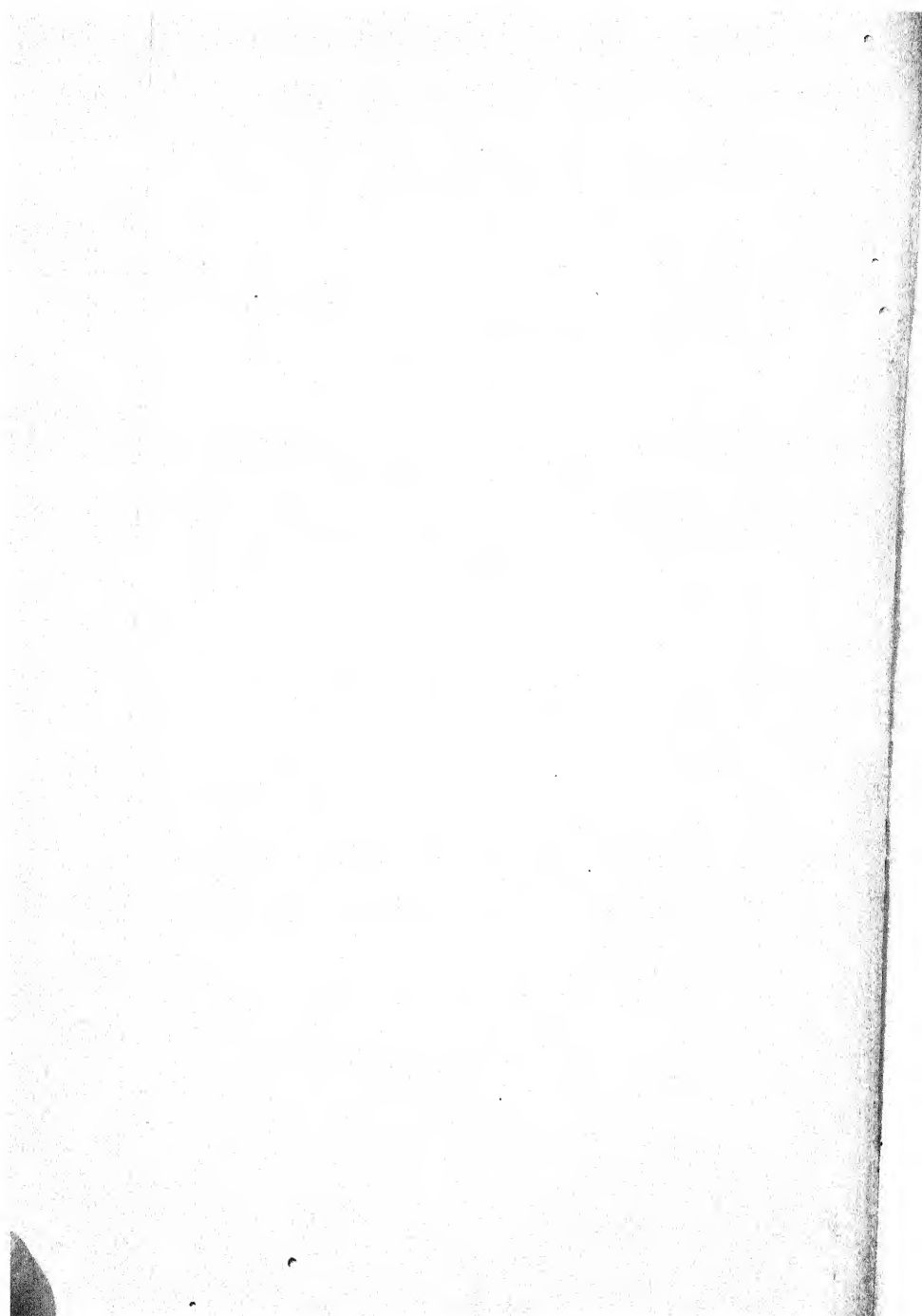
to follow up before resting, so there is here too a gain in time.

The factor of the time of contact is very closely connected with that of the physical condition. Though night operations are always possible, especially when the physical condition of the troops is unimpaired, the arrival of night generally leads to a suspension of hostilities. Troops, which have been marching or fighting all day, must rest at night. Hence, if within the period of delay being gained by a protective guard night intervenes, it falls to the advantage of the protective guard, and it is added to the rest of the delay gained by it.

We have seen that, other things being equal, the delay gained by a protective guard is approximately in direct proportion to its strength, and to its distance from the main body. There must, however, be a limit to this distance, for it cannot be increased indefinitely at the expense of the strength of the protective guard which would become so weak and isolated that it would be exposed to destruction before assistance could be given by the main body, its combat thus becoming a separate application of force in a strategical sense, which is inadmissible. Nor can it be too close, as it will then be impossible for the main body to avoid getting involved in the combat of the protective guard, before it is ready to conduct the principal part of the battle with liberty of

PLAN 5.





action ; for, as has been already stated, it requires space as well as time.

Experience has proved that when the protective guard, which is interposed between a force and the hostile body, which is the principal objective, consists of from one-third to one-sixth of that force, it is a convenient proportion in the great majority of cases. Such a strength has been found sufficient to gain the necessary delay without having to place the protective guard at an excessive distance. It is also not too great a fraction of the whole to expose to the extra fatigue entailed by such duty, as it will allow of periodical relief, when possible, several times from fresher troops.

It is most important that, whenever it is possible, such a protective guard should consist of a complete unit, under its own commander, and, if this is not a unit consisting of all arms, special temporary additions to it such as cavalry, artillery or engineer units, will be necessary.

The extra fatigue and inconvenience, which a protective guard has to suffer for the benefit of the whole force, is by no means equally distributed among all its parts. Many, often the majority, will have little more than the main body has, and this will be especially the case when the protective guard is relatively large. It seems on the whole then, for this reason, a smaller disadvantage to have such a protective guard somewhat too large

than one which is dangerously small. The idea of limiting the size of a protective guard through a fear that its commander may use it wrongly, through excessive zeal and initiative, appears to be totally unjustifiable. If then we remember to detail a complete unit for this task, and to prefer to take one which is rather too large to one which is rather too small, there will seldom be much difficulty as regards the strength of a protective guard, though the limits, viz. one-third to one-sixth, are somewhat wide apart.

The strength of a protective guard, interposed between an army and a secondary object which threatens it, must vary directly with the importance of the task it is expected to perform, but here again a complete unit should be detailed.

Chapter VI.

RECONNAISSANCE AND CAVALRY.

IF we can imagine equality in other respects, a knowledge of our opponent's dispositions gives us no advantage, provided he possesses an equal knowledge of ours. We must evidently strive to secure a preponderance of information, and, therefore, steps must be taken, not only to reconnoitre the enemy but to prevent him reconnoitring us. Any plan of action, which is evolved from the information gained, will entail the use of ground in some form or other, so that it becomes necessary to reconnoitre the country over which we propose to act.

These measures form a part of protection in its widest sense. The methods of combining them with the pure protective duties, into a complete protective system, vary considerably in different countries, but it would appear expedient, at this point, to describe the general modern tendencies in the matter, so that, in the consideration of any of the parts, their relation to the whole system should be kept in view.

Since 1870 the doctrine of the earliest possible

use of the bulk of the cavalry of an army has greatly increased in popularity. No matter what the space between the rival armies, provided it is sufficient for its action, the cavalry is sent forward, practically "en masse," to get into touch as quickly as possible with the enemy's main forces, with the object of reconnoitring them. This desire to obtain the earliest possible information is natural, for, however good the system and working of the secret service, and of the intelligence department generally, information accumulated from sources, other than the troops themselves, requires much confirmation. Such information is nearly always somewhat behindhand, and it may be cut off or cease at any moment.

For the tactical or battle dispositions we require information up to the last moment, and it becomes more and more important as the rival forces approach each other, and the enemy's plans are in a measure fixed. But for strategical dispositions, that is the main grouping of masses, the allotment of their lines of communication, and the general direction of their movement, the earliest possible intelligence is required. It is maintained that the enormous size of modern armies has rendered them unwieldly to such a degree that dispositions originally faulty can only be corrected with the utmost difficulty, and the correction requires an amount of time and space which can only be sought for by the gaining of information concerning the

enemy's main forces, when they are at several days' distance. The employment of the mobility of cavalry on this mission is at once indicated. It requires a body capable of rapidly gaining the necessary distance, in advance of the army which employs it, and, being unsupported at such a distance, of readily extricating itself, should it become seriously compromised. It requires a body which can quickly be transferred from an unfavourable to a point favourable for reconnaissance. It is certain, however, that the enemy will take every possible protective measure, including the use of force, to prevent his own army being reconnoitred. Consequently a large amount of cavalry force is wanted to ensure the necessary penetration of the enemy's advanced troops. But it is also probable that the enemy will use the same means, so that an additional obstacle to the gaining of information, viz. a mass of hostile cavalry, is at once formed, necessitating the employment of extra force to overcome it. Hence easily arises the idea of employing the utmost available strength of cavalry for this early reconnoitring mission.

Unless the two rival cavalry advanced forces deliberately endeavour to avoid each other, it appears almost inevitable that they will meet, and a struggle for supremacy take place between them, and this may well happen before the remainder of the two armies can take part in the fight.

The victorious cavalry will be free in its attempt

to reconnoitre the hostile army by force, while, on the other hand, the beaten cavalry must renounce such a project. Reconnaissance by small detachments, what may be called reconnaissance by stealth, will still remain open to both sides, but that of the beaten side will be rendered more difficult. The loss of *moral* alone will have a far reaching effect on this. The want of support will tend to render such reconnaissance feeble, and the periodical relief of detachments impossible. The difficulties of sending back information, through a hostilely occupied area, will be very great.

Assuming the power of a large cavalry force to gain valuable strategical information by exerting its strength, it can safely be said that the army, whose cavalry is victorious in this preliminary engagement, will at once gain a very great advantage over its rival. Its movements can be directed against something which is at least approximately known, and a plan of action can be entered on, leading up to the principal object, which is so sound in its general character as to be capable of changes, which may be necessitated by later information. This advantage must most favourably influence its chances of success in the main battle which follows. On the other hand, the army, whose cavalry has been defeated, must, for want of information, carry out all its movements in a dense medium of uncertainty, which condition will materially reduce its chances of success.

The movements of the cavalry mass are generally regarded as being, to a considerable degree, independent of those of its own army, and, from this fact, as well as on account of its distance, the system has arisen of making it independent of the rest of the protective system, and only responsible to the Commander-in-chief. It is usually called the army, independent, or strategic cavalry.

Although a search for information is the primary object of such a cavalry force, it undoubtedly assists in preventing hostile reconnaissance, and, to a certain extent, it constitutes a portion of an army's protective guard. It will probably meet a similar hostile body, with a similar mission, which it will engage. Its dispositions cover a considerable front, and they undoubtedly have a very substantial effect in preventing the smaller bodies of the enemy from reconnoitring the forces which lie behind.

The possibility of the enemy's passing the independent cavalry mass is held to necessitate reconnaissance from the protective guard, in advance of itself. This is in addition to the protective reconnaissance which is carried out by the small parties, forming its outer fringe (E . . . E Plan 2. Chapter iv). These are tied to it, and, therefore, do not possess a sufficient liberty of movement to allow of their going in search of the enemy. Owing to the weakness of the cavalry with the protective guard, namely the protective cavalry,

this reconnaissance must generally be limited in extent as regards distance and the use of force to ensure penetration of the enemy's screen.

As already explained, in Chapter iv, the fanlike disposition of the protective guard is not only purely protective, but is also calculated to prevent the enemy's gaining information, either of the guard itself or of the main body.

As a third line of cavalry reconnaissance, parties of the divisional cavalry may also perform useful close reconnaissance, immediately round the bodies which lie behind the protective cavalry, namely the rest of the protective guard, and the main body of the army.

The information gained by the different cavalry organisations, already mentioned, though very valuable, will not usually be sufficient for the purpose of battle. Much of it will refer to dispositions of the enemy at a considerable distance and at a time when his plans were not fixed. The protective guard, taken as a whole, will nearly always be the most efficient and important reconnoitring agent of the entire protective system.* It possesses a very substantial power to force the enemy to unveil a material portion of his dispositions, and this at a time when his plans are highly developed. Its position in advance of its own army

* The limitations as regards the employment of a protective guard as a reconnoitring agent, for the purpose of forming a plan for battle, when we are determined to act offensively, are explained in Chapter II.

has a tendency to keep hostile reconnaissance at a distance from it.

It is generally held that, during a battle, large masses of cavalry are best placed on the flanks, both for a continuance of reconnaissance, and for other action. Hence as the rival main bodies approach each other, first the independent cavalry, and then the protective cavalry, have to move to one or both flanks. The frontal reconnaissance of the enemy's army will thus pass successively from the independent cavalry to the protective cavalry, and then to the protective guard.

The different reconnoitring bodies, including the protective guard, come into play one after the other. The effort of each is added to the efforts of those previously engaged. One does not altogether relieve the other, except there is some special object for this. Thus reconnaissance constantly increases in intensity as the interval between the two armies decreases, that is, as it becomes more important.

Attempts are sometimes made to separate the means of preventing hostile reconnaissance from those for securing the main protection, and we read of offensive and defensive screens for this purpose, as if they were something apart from the best dispositions of the protective guards. If we were able to limit the strength of hostile reconnoitring parties, such separation would no doubt be feasible, but we must, in the great majority of

cases, accept the possibility of the enemy's using very powerful forces for ascertaining our dispositions, and this may necessitate the whole of our protective system being brought into play to prevent their doing so. Thus, if a special organisation is used to prevent hostile reconnaissance, the difficulty arises of where it should stop. It would appear preferable to abandon the idea of any special advanced body devoted to this object, and to allot the task of preventing hostile reconnaissance to the protective dispositions of the main protective bodies.

But, whether we employ special protective advanced screens, or are content with the fanlike disposition of our main protective forces, some hostile parties will always succeed in penetrating or circumventing them. To prevent such enterprising parties from gaining information, we can, as will be seen later, form a screen, which is weak and very close to the bodies to be shielded from observation.

The duty of obtaining information about the country can be allotted to detachments or patrols from any of the cavalry bodies, already mentioned, without interfering with their other work to any appreciable extent.

The German method may be regarded as the extreme type of the doctrine of the forward and independent use of cavalry in war, and it appears necessary to consider it in some detail. The offi-

cial view, so far as can be judged from published regulations, will be given first.

Each mixed division has, on active service, one cavalry regiment of four squadrons, each of 180 men and horses. In an army corps it may sometimes be advisable to combine the cavalry of the two divisions, but at least one squadron must be left to each division (F.S.R. 147).^{*} The divisional cavalry carries out the duties of protection for its own division, or army corps, on the lines already described. It corresponds to a combination of the English divisional and protective cavalries, but there is no separate organisation, as in the case of our protective cavalry, for a number of divisions forming an army. The commander of a force actually covered by a divisional cavalry decides whether it is to remain directly under his own orders, or under those of the commander of the protective guard in front of which it is employed (F.S.R. 165). It is responsible for close (tactical) reconnaissance, and, when there is no army (independent) cavalry in front of it, for distant (strategical) reconnaissance as well (F.S.R. 143). Such reconnaissance is carried out by patrols, and its strength will seldom permit of these being supported by reconnoitring squadrons (F.S.R. 145).

The remainder of the cavalry is formed into cavalry divisions.

^{*} F.S.R. = Field Service Regulations of the German Army, 1908.

- 1 Division = 3 Brigades.
- 1 Brigade = 2 Regiments.
- 1 Regiment = 4 Squadrons.

A cavalry division also includes :—

- 1 Horse Artillery Battery.
- 1 Light Ammunition Column.
- 1 Pioneer Detachment.
- 1 Machine Gun Battery.

The war establishment of a cavalry division is :—

5,000 men.

5,300 horses.

200 vehicles, including guns.

The length of the column of a cavalry division is :—

5 miles for troops and 1st line transport.

1 mile for 2nd line transport.

Cavalry divisions may be grouped into cavalry corps, the numbers of divisions being in accordance with the particular requirements of each case. These corps are directly under the Commander-in-Chief.

Now, provided that the necessary space exists, which is by no means always the case, cavalry corps are pushed forward, ahead of the rest of the army, in specially selected directions, to “obtain an insight into the enemy’s dispositions as early as possible. It is their object not only to drive the enemy’s cavalry from the field, but to repulse or break through his advanced detachments of

all arms, and to penetrate to the neighbourhood of the columns of his main army." (F.S.R. 133).

If this army cavalry is strong, it will have to move by several roads, and special measures must then be taken to ensure the cohesion of the columns, so as to unite them before collision with the enemy (D.R.C. 413).^{*} It must have its own protective system round it, and this is arranged on the same principles as for an army, viz. a screen of protective guards, diminishing in size as they lie further from the main body, and moving in harmony with it (F.S.R. 189 et seq.) In addition to thus providing for its own protection, it has to take steps, by reconnaissance outside the screen, to enable the commander to obtain early information of ground and hostile detachments anywhere near him, so that he can form his plans for action. To this end close (tactical) patrols are pushed out in the necessary directions (D.R.C. 408-410). But the great object of the army cavalry is to obtain information of the enemy's main body, to enable the Commander-in-Chief to act. For this, distant (strategical) patrols must be pushed forward, not only in the direction where the enemy is known to be, but often in other directions in which he may possibly appear (F.S.R. 137). If the distance of these patrols is so great that they cannot be reinforced, relieved or supported from the main body of the army cavalry, or the transmission of their

^{*} D.R.C. = Drill Regulations for the Cavalry of the German Army, 1909.

information cannot be ensured, then reconnoitring squadrons will be pushed forward, furnishing the required distant patrols, and, when necessary, clearing the way for them by force (F.S.R. 122, 134).

A zone of action, with reference to the road system, is assigned to each reconnoitring squadron or distant patrol. These zones should not usually exceed ten to fourteen miles for a squadron (F.S.R. 136).

The commander of the reconnoitring squadron, will divide up the work to the distant patrols he sends out. Special officers' patrols may be attached to the squadron for work within the zone (F.S.R. 135). The reconnoitring squadron moves within its own zone independently of the army cavalry's main body, and must have its own small system of protection. Nothing definite is laid down regarding the strength of a reconnoitring patrol, this depending on its task, and the number of messages it has to send back. Officers must be in command of important strategical patrols, and there should be a second-in-command specially appointed.

Plan 1 gives an idea of the full development of the whole system.

The following general principles apply to the whole action of the army cavalry, when operating in this capacity. For all bodies, even patrols, strongly offensive action is necessary, provided

the circumstances and their own duties allow of this (F.S.R. 118). Great freedom of action must be allowed to the leaders of all detachments, great or small (D.R.C. 399). Every means, from wireless telegraphy to messengers, is to be used to ensure the rapid transmission of orders and information (F.S.R. 138, 139). All bodies, great or small, are advised to adopt the method of advance known by the expression "bonds successifs," that is a quick advance from one position, which is favourable for observation, defence, or readiness for offensive action, to another, with halts at such positions for a considerable time (F.S.R. 140). Special additions to the army cavalry, such as cyclist detachments and infantry carried in wagons, are mainly intended for the duty of strengthening local resistance, or overcoming that of the enemy (D.R.C. 521).

The regulations give us little indication of how the army cavalry will obtain the necessary strategical information. The commanders have evidently to act as they consider best. Presumably the action will be somewhat as follows :—

The reconnoitring distant patrols penetrate the enemy's screen as far as they are able. When held up, some of them can be assisted to progress further by the supporting offensive action of the reconnoitring squadrons. The commander of the army cavalry, if successful in the engagement with the corresponding hostile body, selects, from the inform-

ation received from the reconnoitring squadrons, the point at which he will tear aside the enemy's screen with the main body of his cavalry. Having accomplished this, he guards an exit, and pushes forward new reconnoitring patrols to get into touch with the enemy's main forces. As the two main armies closely approach each other, the commander must avoid getting the army cavalry squeezed in between them, a position in which it would be in considerable danger, would be hampered for want of space, and might retard the advance of the main columns, if driven back on them.

He has consequently got to work the army cavalry to a position on one flank, and forward, of his own army (D.R.C. 522). This we may regard as his normal battle position, and from it he has to continue the reconnaissance of the enemy's flank and rear in that direction, and is available for any battle task which may be allotted to him, or which he may undertake on his own responsibility.

The reconnoitring squadrons are relieved of their work as soon as possible by the divisional cavalries and endeavour to rejoin their own units.

Nothing is said about the case where the army cavalry is defeated in the preliminary cavalry battle.

Books of regulations are seldom sufficient to show the real tendencies of an army. We are

fortunate, therefore, in having available General Von Bernhardt's admirable work *Cavalry in War and Peace*, in which he explains much which is vague in the German regulations, and makes many free and valuable criticisms. He is a cavalry officer of much distinction; he assisted in the elaboration of the *Drill Regulations for the Cavalry of the German Army*, 1909; and he is the strongest possible advocate for the forward and independent use of the great mass of the cavalry for strategical reconnaissance.

In what follows, an endeavour will be made to give, as briefly as possible, his views on the more important points in the German official doctrine, which appear to require further explanation.

The role of the German cavalry is at present essentially a strategic one (367), but the duties of the army cavalry are new (14), and there is a want of any sort of tradition for the task which it will be required to carry out in the next war (5). On its achievements, in the early days of the war, will depend, to a considerable extent, the success of the first great decisive encounter between the main armies (7). Even the German cavalry at present is too weak for what is really required (356).

The very essence of cavalry action lies in the offensive spirit, and the service of reconnaissance must necessarily be carried out in an offensive

spirit (19). The army cavalry must be pushed forward in those decisive directions, which promise the best fulfilment of the reconnaissance needs of Army Head Quarters (20). A group of army cavalry, namely a corps or division, under one commander, should advance in separate columns. Besides the convenience of such an arrangement, it allows of the easier support of the greatest number of reconnoitring squadrons in advance, and of a shorter line for the transmission of very urgent reports (23). The dangers of such temporary dispersion can be overcome by good intercommunication, good leadership, and the delaying action, ensured by the proper use of fire action (25). Concentration before the cavalry battle is by no means essential as long as it takes place during the battle (21). In spite of its advancing by several roads the army cavalry will only cover a portion of the front of the main army (15).

It is by no means the duty of the army cavalry invariably to seek out the enemy's cavalry, in order to defeat it. To do so would allow the enemy's cavalry to dictate its movements. It must rather subordinate all else to the particular objects of reconnaissance (20). This can only be obtained if successful in the fight, while an unsuccessful battle will paralyse the activity of the cavalry, and may cost the army the loss of its organs of reconnaissance. It should only undertake such a fight when success can be reckoned on,

with a certain measure of probability. Efforts should be made to clear up the situation, by a careful feeling of the enemy and a gradual engagement of force. By this means it will be possible, either to seek a decision, or to break off the fight in time to avoid the risk of incurring too considerable a loss (188). In the case of a mixed hostile force, considered too strong to attack frontally, endeavours may be made, if the general situation allows, to separate the cavalry from the less mobile infantry by repeated turning movements, and then attack it when isolated. If successful in this, the infantry, if not too strong, can be surrounded. Should the army cavalry meet a superior force of all arms, such as might be pushed forward by the enemy's army, to support the offensive of his own cavalry or to serve as a pivot of manœuvre for it, a decisive battle must on no account be undertaken with it (159). A great cavalry encounter, in which artillery, fire action, and shock tactics are all used, will closely resemble a battle between mixed forces, and bear very little resemblance to the old idea of a cavalry fight. The breaking off of such a fight, should it become necessary, will present extraordinary difficulties (179). If it is a matter of mounted combat, the breaking off of the actual fight is quite impossible (184).

The allotment of zones to reconnoitring squadrons (or patrols) must be regarded as only a foundation for the methods to be adopted, and,

perhaps, will only attain its full effect during the first concentration of opposing armies, when the hostile groups deploy along a land frontier on a wide front. During operations the original scheme must be subjected to continual changes (29), which can be best carried out when reconnoitring squadrons are being relieved (28). The whole system of allotment of zones will often completely break down, and then squadron leaders will have to act on their own judgment (35).

The relief of reconnoitring squadrons requires most careful preparation, and it will best take place after a great tactical crisis, or decision, such as a change of direction of an army (29).

Reconnoitring squadrons must avoid any struggle with superior hostile forces, either by falling back or going round them. Every effort must be made to maintain communication with their own distant patrols, as news must first be procured before it can be sent back. The signalling arrangements with a squadron frequently enable it to communicate back over the heads of hostile bodies it may have passed (44). The number of distant patrols, detailed from a squadron, must vary with the importance of the task, but economy must be practised rather in the matter of close reconnaissance and security than in distant patrols (39). Both reconnoitring squadrons and distant patrols must advance by "bonds successifs." (51).

The efficiency of the horses must not suffer from

over-exertion. Except, of course, to meet particular cases, it will be sufficient if the squadrons can cover daily twenty-five miles, and the distant patrols thirty-five to forty miles (37).

The work of the divisional cavalry has increased in importance (14). Its duties vary greatly with its position, namely whether it is shut in by that of other columns, or it is on a flank of the army, and whether it is covered or not by the army cavalry (73). If covered, it must ensure the taking over of the distant patrol work, when the army cavalry clears the front (74). If not covered, it must carry out this distant patrol work from the first. Its weakness makes this very difficult, and will seldom allow of sending forward reconnoitring squadrons. It must husband its strength for distant reconnaissance work by advancing by "bonds successifs," by ensuring support from the rear in case of need, and by resting at night behind the infantry outposts, unless the distance of the enemy is so great that danger to it is then negligible (75). Its distant reconnoitring power will obviously vary inversely as the front it has to cover.

Though generally speaking the addition of cyclists and quickly transported infantry is not to be advocated in the case of the army cavalry, as they hamper its independence of movement, they may be usefully employed with divisional cavalry, in support of its screening work, and to form reporting centres (90).

The doctrine is essentially German in its origin and its application to that army is possibly justified by the numerical superiority and high efficiency of its cavalry. It cannot, however, be accepted blindly by other armies, which do not possess these advantages. The doctrine is so widely accepted that it will, almost undoubtedly, be followed in the next great European conflict, so it appears expedient to recognise it in what follows, but in doing so we should remember that it is quite possible that there may be a strong reaction against it in the future.

The question will receive further consideration after other forms of protection have been discussed.

Chapter VII.

CLASSES OF PROTECTION.

IN the chapters which follow protection is divided into four classes, each of which has distinctive characteristics, which should be borne in mind.

I. DIRECT PROTECTION.

When an army is advancing, preparing to advance, or is intended to defend a position, a protective system is interposed between it and the principal hostile force, which it has to attack, or the attack of which it has to resist. The action of such a system when it engages or comes into contact with the enemy will profoundly influence the battle between the main armies, as it must form the introduction to it, and cannot under ordinary conditions be separated from it. This class includes advanced guards and outposts.

2. UNSUPPORTED PROTECTION.

When an army is retiring before a hostile force, a battle with which a leader desires to avoid or postpone, he interposes a protective system between them. Until the leader changes his views,

the action of the protective system has to be regulated on the assumption that no support is available from the main body. This class includes rear guards.

3. SECONDARY PROTECTION.

Under the conditions mentioned in either 1 or 2, an army may be threatened by a second hostile force which, for the time being, is not considered the immediate objective or the principal danger, but which it is desirable to keep at a distance till the leader has gained his object with respect to the principal hostile force. The action of a protective system, interposed between the army and the second hostile force, does not directly influence the action of the main body as long as it is successful. It has, however, the moral support of the main body and can fall back on it in case of great need. This class includes containing detachments, flank guards, rear guards to forces advancing, and advanced guards to forces retiring.

4. TERRITORIAL PROTECTION.

A protective system may be employed to guard a frontier, a coast line, or an important area, against hostile invasion. Support may be very distant or in a form which is unusable for some time.

Chapter VIII.

ADVANCED GUARDS.

IN order to gain a thorough insight into the working of direct protection, it would appear advisable to consider it at first in its simplest form, namely the protection of a single, independent column, advancing by one road.

As long as the main body is in movement, the protective detachment, which immediately precedes and directly covers it, is called the "advanced guard," or sometimes the "tactical advanced guard."

The cavalry, which has been given a strategical mission, moves independently of this advanced guard, as its movements are made in accordance with those of the hostile army, which it has to reconnoitre, while those of the advanced guard are dependent on the movements of the body which it is covering. Hence it is possible, generally speaking, to consider the composition, dispositions and functions of the advanced guard, apart from those of the independent cavalry. But this is not possible in the case of the protective cavalry. If

the protective cavalry is placed under the orders of the advanced guard commander, it becomes a portion of the advanced guard. If the leader of the whole force prefers to keep it directly under his own orders, it cannot be considered as coming within that term. But, even in this case, the functions of the protective cavalry are so closely associated with those of the advanced guard that it is impossible really to investigate them apart. The protective cavalry not only protects the main body, but it also protects the advanced guard. Their dispositions and action are interdependent, and they must constantly work together in harmony with each other. Although the advanced guard may carry out a limited amount of reconnaissance through its own means, it is really dependent, under normal conditions, on the protective cavalry for its information. The protective cavalry constantly requires support from the advanced guard, and it is only the knowledge that this support is near that allows it to act with boldness. The action of the protective cavalry is the introduction to the action of the advanced guard.

The general principles underlying the action of a protective guard, which we have already examined, apply to the advanced guard in combination with the protective cavalry. The question of their separation into independent commands will be discussed later, after their combined action has

been examined, but in what follows it must be understood that, where the term "protective guard" is used, it includes the advanced guard and the protective cavalry.

The principal duties of a direct protective guard are :—

1. To supplement the reconnaissance of the independent cavalry, when the enemy is near, and his plans are fixed, partially or wholly.
2. To prevent the enemy from reconnoitring the forces protected.
3. To give the main body time and space to lay aside its necessary unreadiness, in the full sense of the expression, as already explained.
4. To clear the way for the main body, so that the march may not be interrupted by small hostile bodies.

The necessary reconnaissance will be begun by the protective cavalry's patrols endeavouring to penetrate through the enemy's advanced troops by stealth, but there will be a constant increase in the use of force to obtain intelligence, till the power of the protective cavalry is no longer sufficient, and the advanced guard, partially or wholly, has to be brought into use as a reconnoitring agent.

As the enemy will endeavour to reconnoitre in a similar manner, the means used to prevent his doing so will have to be increased gradually, till

possibly the whole of the protective guard is involved.

The gaining of space and time for the main body to lay aside its unreadiness will generally require the entire force of the protective guard, unless the enemy adopts a defensive attitude.

As the strength of the hostile bodies, which may directly obstruct the advance of the main body, cannot be foreseen, it may be necessary to employ the whole protective guard to drive them back.

Thus in no case can we separate the functions of the advanced guard and of the protective cavalry. For any of these duties the power of the protective cavalry will soon be overtaxed, and that of the advanced guard will have to be brought into action to strengthen and support it.

Hence we must have a disposition of the protective guard as a whole, which will be suitable for one or all of these requirements.

It seems therefore essential, first, to consider the composition of such a protective guard, as a whole, and, afterwards, to divide up the forces so allotted into protective cavalry and advanced guard.

As has been seen, when considering the theoretical disposition of a protective guard, mounted forces are necessary for the protective bodies which cannot move by the direct roads, and, for those which have to prevent the penetration of the screen by small hostile reconnoitring parties, infantry is too slow. A very mobile force is re-

quired to seize important points, and hold them till the infantry can arrive. The early reconnaissance, though called tactical, requires to be carried out considerably in advance of the protective guard, in order to allow of that body being employed to the best advantage, and for this mounted troops are essential. Thus the work required from the cavalry is heavy, and it is consequently the usual modern plan to allot to the protective guard practically the whole of the cavalry left after detailing the independent cavalry, sufficient mounted men for intercommunication, and any other special detachments for secondary or local protection. Any horse artillery left will naturally accompany this cavalry. If the column possesses mounted infantry or cyclist detachments, they will generally be joined to the protective guard, unless there is some particular reason for employing them elsewhere.

One third, or less, of the infantry and field artillery of the column is allotted to the protective guard, as previously explained, in the form, if possible, of a complete self contained unit, such as a division. If the column is so small that a division would be in excess of one-third then a brigade, possibly two, would be detailed, and a number of artillery units in proportion specially joined to it. Thus with a column consisting of a division, one or two brigades of artillery could be suitably given to an infantry brigade. If the protective guard

will probably stand to fight, the infantry should be strong, as it is the most tenacious arm in defence. If it is likely to employ a fighting retirement, the artillery must be increased, as it is then that arm which gains delay without the necessity of the force getting "fixed."

Although in our army field artillery is frequently allotted to the smallest advanced guards, most continental writers agree in thinking it inadvisable to do so, when the advanced guard is much less than a brigade. There is certainly a great danger, with a small force, of field artillery being surprised by hostile artillery, while still on the move, and destroyed before it can fire a shot.

A protective guard should usually be strong in engineers in order to repair the roads where necessary, and to assist in constructing entrenchments for a stubborn defence. The existence of rivers or canals, in advance, may make it necessary to send pontoon units with them.

The Germans attach a light ammunition column to the advanced guard, and, bearing in mind the rapid expenditure of ammunition by both infantry and artillery when a force is seriously engaged, this seems very desirable, especially when the protective guard is a considerable distance in advance of the main body.

Sufficient medical units must be attached to provide for a length of independent action, which will increase with the size of the protective guard.

As the commander of the whole force will probably be with the advanced guard, at any rate during the march, all the aeroplanes not required for the independent cavalry, and any other detachment, will be with the protective guard.

It is most desirable that the road in rear of the protective guard should be kept as clear as possible for the advance of the main body. Consequently the amount of transport with it must be limited to what is absolutely essential. Under ordinary conditions when the distances involved are not great, it will consist of the portion of the first line of transport, which invariably accompanies troops, even into action. The rest of the baggage will follow the main body of the whole column. This frequently constitutes a great hardship to the whole protective guard, especially to the protective cavalry. Hence, when the protective guard is far in advance of the main body, or when its relief is not possible, it may be advisable to send some extra transport with it. The inevitable introduction of motor transport for practically all baggage will so shorten the length of road taken up, that this concession will, in the future, be less objectionable than at present. It will also allow of baggage, kept behind the main body on the march, being quickly sent forward to the protective guard, when the whole force comes to rest. In any case, its introduction will greatly lessen the discomfort of protective bodies.

The leader, in considering the whole strength of his protective guard, must remember that, if it stands to fight, the time he requires to lay aside the necessary unreadiness of the main body depends alone on the resisting power of the protective guard against superior numbers. It must be strong enough to be able to hold out for the number of hours, which will elapse before he can bring his main body into action to the best advantage, thus supporting the protective guard directly or indirectly. The distance it is in front gives him the necessary space for his manœuvre, but it does not give him the necessary time. If the protective guard is not strong enough to stand to fight, but gains time by a fighting retirement, then the distance between them is a material factor in gaining the necessary delay, as well as the necessary space.

The commander having determined the strength of his direct protection as a whole, a further subdivision of this must be made, by himself, if the protective cavalry is to be directly under him, or by the commander of the protective guard, if the advanced guard and the protective cavalry are to form a single command.

When the protective cavalry moves forward far in advance of the advanced guard, and this it may do to the extent of a day's march or sometimes even more, the advanced guard must have some cavalry for its local protection, that is reconnaissance, in its immediate neighbourhood, to

screen it from hostile bodies which may have succeeded in avoiding the protective cavalry. Mounted men, too, are always necessary for intercommunication. Thus, in all cases, some cavalry must remain attached to the advanced guard. In our service, the cavalry (or mounted infantry) for this purpose is taken from the divisional cavalry (or mounted infantry), which forms a separate organisation from the protective cavalry. All the cavalry, with this exception, generally forms the protective cavalry, and to this will be joined the available horse artillery. Any spare mounted infantry will usually join the protective cavalry.

It will depend greatly on the nature of the country, the state of the weather, and the existing requirements whether any cyclist detachments should be allotted to the protective cavalry at once or not. If the conditions for their use are unfavourable, such as hilly country, heavy roads, etc., they may prove an incubus to the protective cavalry.

It seems improbable that any aeroplanes could be spared for the protective cavalry. The distance of that body from the advanced guard is so small, from a flying point of view, that aerial reconnaissance, carried out from the advanced guard, would appear to meet all requirements.

As Von Bernhardt very justly points out, the weakness of the protective cavalry compels it to arrange for support from the advanced guard, in

case of necessity during the fight, and to rest at night covered by the infantry outposts. To take its own measures for security would make too great a demand on its strength, and would quickly deplete it. Only when the distance of the enemy renders a serious attack out of the question, can the protective cavalry remain in advanced positions. Thus, when it is contemplated to leave it at night in advance of the advanced guard, the danger is not great, and the essential transport can accompany it, otherwise there is no object in sending forward transport with it.

Special circumstances, such as the seizing and holding of important points in advance, may necessitate the sending forward of some infantry and engineers, either on foot, in vehicles, or in motors, and these would be placed under the orders of the commander of the protective cavalry.

With the above exceptions, the whole of the troops for direct protection would belong to the advanced guard.

As the distance between the two armies decreases, the protective cavalry will require a continual increase of support from the advanced guard, as regards both infantry and artillery, and, when the protective cavalry is independent of the advanced guard commander, it is very difficult to settle up to what point the commander of the protective cavalry shall continue to maintain his independence over his ever increasing force.

The above remarks, as regards the composition of the advanced guard and the protective cavalry, apply to a country where cavalry can be used with advantage. In a mountainous district, where it is difficult for a mounted man to leave the few roads which exist, it is evident that much danger would be incurred, and little advantage gained, by pushing cavalry ahead. The greater part of the work must be done by infantry, and the mass of the cavalry kept back, behind the advanced guard, or with the main body, till a more suitable area for its activity is reached. The progress will, of course, be very slow, but this is unavoidable. As an extreme case, we have the dispositions of a force engaged in mountain warfare against an unorganised enemy, which will receive attention later.

It is also somewhat doubtful how the cavalry will be able to work far ahead of an advanced guard in a very close and hostile country. Every road is then a defile, and any progress parallel to it is most difficult and slow. At every wood, village, or bridge, small bodies of hostile troops of a second or third line of organisation, such as the German Landsturm, will be met with.

In Chapter ii we have examined the general principles on which the delay required from the protective guard should be calculated. We want time for reconnaissance, deployment, manœuvre, orders and friction, and there must be space for

the second and third. The leader knows the exact dispositions of his single column, the physical condition of the troops, the state of the road, etc., so that there can be little difficulty in arriving at the time necessary for deployment.

Even if he desires to use the offensive, the possible different manœuvres, open to a single column, are not of a complicated nature. The following types of manœuvre are open to him :—

1. To prolong the line of battle of the protective guard to right and left.
2. Leaving the protective guard without direct assistance, to throw in the whole of the main body on the right or on the left.
3. While strengthening the fight of the protective guard, to throw in the whole of his remaining strength on the right or on the left.

The maximum forward displacement to the point for deployment, for offensive action, will generally be less than the distance of the line of resistance of the protective guard, if that body fights where it is, or will be still less, if the protective guard retires fighting. The lateral displacement will not usually exceed the battle frontage of the whole column. Even allowing for the side roads used not being direct, the total maximum displacements is seldom likely to exceed the sum of these two, and it will generally be considerably less. The time to be gained by the

protective guard should include this. If the leader determines to assume a defensive attitude, the displacement of the main body will be less, and there is none when a retirement takes place.

The space required for manœuvre should be such that the main body does not come under hostile artillery fire, till it is in the position from which to deliver its blow. This implies, in fairly open country, that its march to that position should not come within three miles of the enemy. It is highly advisable that this march should be removed, as much as possible, from the idea of a flank march. With reference to the general direction of advance, it should be carried out as much forward as possible, that is, the starting off point for offensive action, or place of deployment, should be in advance of the head of the main body, wherever possible. Assuming that the hostile force is more deployed, hence more prepared, its leader will not like to push forward his flank columns much beyond the line of resistance of the protective guard, till he has disposed of that body, as it will break up his line of battle, and he must generally remain in doubt as to its strength till he has ascertained it by the use of sufficient force.

When the strength of the protective guard is large enough to allow of such isolation for the period which the main body requires to lay aside its unreadiness, it thus comes about that the

minimum space between the line of resistance of the protective guard and the head of the main body must considerably exceed three miles, if the protective guard stands to fight. If it is not made strong enough to stand to fight, but has to gain time by a fighting retirement, this space must be increased very considerably, or the main body must form "back," for subsequent offensive action, on some line in rear of its head, an alternative which is to be avoided, as it gives rise to a general idea of inferiority.

As the enemy is nearly certain to be covered by protective troops, through which the protective cavalry will seldom succeed in penetrating far, the advanced guard, in order to gain information of the dispositions of the hostile main body, will have to be deployed, often fully, and even to fight for some time, before such dispositions are ascertained by force. Hence the space required for the manœuvre of the main body must be measured from the tail of the advanced guard, and not from its head.

The issue of orders and their transmission is much quicker than where many columns are concerned. The column being on one road, there is no difficulty about having to appreciate where the different units will be when orders reach them, nor is there a doubt that the action of the enemy, in their vicinity, may render the orders, when received, impossible to carry out. Verbal orders

can be issued rapidly to the head of the main body, so that it may move in the right direction at once, and no check be caused to the forward march of the units following. The actual orders can be founded on a simpler idea, and do not need so much consideration. There is practically no possibility of orderlies losing their way. Subordinate commanders, when they receive their orders, are moving, generally approximately, in the right direction. Friction in all its branches is greatly reduced.

In civilised countries, where good maps should be always available, it is not a difficult matter for the leader, from a study of them, before the march begins, to form an estimate of how far the advanced guard should precede the main body, for such special purposes as seizing the necessary positions for covering the passage through any defiles, which may exist, or holding commanding ground, the possession of which by the enemy would place the main body at a disadvantage.

There can be little doubt that the general modern tendency is unduly to decrease the distance of the advanced guard. There is a distrust in the power of the advanced guard to hold out long enough, and, with the extremely weak advanced guards frequently met with, this is justified. A fear exists that the commander of a strong advanced guard will commit the whole force to a line of action not acceptable to the leader of

the whole column. "Initiative" and "offensive action at any price" have, of late years, been so universally preached, that the very suggestion of limiting a detachment commander in these respects is little short of heresy. Yet it is quite evident that his action must be occasionally curbed. The popular method of doing this appears to be to limit the harm that can be done, and the inclination to do it, by diminishing the strength of the detachment, regardless of the evil consequences resulting from such a procedure. Hence we have miserably weak advanced guards, with only a mile or so between them and the main body, even in large columns, a system of protection which absolutely fails to secure the main body in its necessary unreadiness, and which must result in the leader's having to suffer the will of a more ready opponent, or in an encounter battle, where the whole main body is used up, by degrees, as it arrives, in order to meet the most pressing requirement of the moment. The solution of the difficulty lies in a unity of thought and doctrine, in a highly trained body of officers, not in expedients which are fundamentally unsound.

In any consideration of the dispositions of the protective guard, it is necessary to remember that the protective cavalry must have a certain amount of freedom of movement, apart from the advanced guard.

The protective cavalry moves forward by what

the French calls "bonds successifs," that is, it goes quickly over some stretches of country and then stops for some time, and this has several advantages. Nearly every country, however close, includes certain areas, over which protective observation is easier than in others, or certain features, which confine the enemy's reconnaissance to a few well defined lines. There are also certain positions, from which observation can be carried out, while the observers remain hidden. A few examples will be enough to illustrate what is meant.

When passing through a wooded country, a more open strip, over which observation is easy, may exist. The protective cavalry might then push on quickly, taking due precautions, through the wooded tract, and stop on its edge to observe over the open area, remaining carefully hidden while doing so.

If the line of advance is crossed by a canal or river, which is only fordable here and there, so that its passage is confined to some fords and bridges, it is evident that the cavalry, having gained such a line, will be able, with some ease, to prevent hostile penetration, and the return of hostile patrols.

A line of high ground will also generally afford facilities for observation, combined with cover for the observer.

The employment of many small bodies, all in

movement, some marching by roads, and some across country, all having tasks varying in difficulty, is certain in the end to lead to absolute confusion, unless they can be periodically re-organised. The advance by " bonds successifs " allows of this being carried out, when the protective cavalry halts, and they can then be given new lines of advance and fresh instructions.

It is a form of advance which is well suited to a mounted body, as the pace can be varied, and horses can be watered and fed, and, generally, receive far more attention and rest.

The knowledge that important lines and positions, in front of the advanced guard, are held, enables that body to move forward with greater confidence and security.

In a hostile country it will make it difficult for the inhabitants to communicate with the enemy.

It assists the rapid transmission of messages back to the advanced guard, or even the main body, as signalling stations can often be established at favourable points, which there is time to discover.

The tactical reconnoitring patrols, which are sent forward in advance of the protective cavalry screen, should move independently of these " bonds successifs " of the rest of the cavalry, though they employ a similar method for advance and observation.

This method has the disadvantage that, when the protective cavalry is moving quickly forward,

it is impossible to examine the country passed through in as thorough a manner as when it is moving slower. When the inhabitants are hostile, it will be fairly easy for hostile patrols to remain hidden till the protective cavalry has passed, but they have still to encounter the cavalry with the advanced guard, and, as has been shown, it is hard for them to get back with any information they may have collected.

This disadvantage can be avoided by only sending on a portion of the protective cavalry to occupy the forward line of observation, the remainder following up more deliberately, and maintaining the protective observation line as it advances. This, however, constitutes what, under certain circumstances, may prove a most undesirable splitting up of the force. If one portion of the protective cavalry continues to hold one line of observation, till a forward line is occupied by another portion, and then goes on quickly to occupy a more advanced line still, the two portions moving forward alternately in this manner, the disadvantages of both methods exist, namely, a dangerous splitting up, and an insufficient examination of the ground passed over.

Theoretically it should be impossible to penetrate the screen by stealth. The farthest-out and smallest detachments of the protective cavalry (EE in Plan 2. Chap. iv) should be capable of thoroughly examining all the ground passed over,

but this will never be possible in practice. In a close country, especially when the inhabitants are favourable to the enemy, it is always possible for some hostile patrols to escape notice. It would take too long to examine every possible hiding-place. The strength of the protective cavalry is limited, and particularly in the case of a single independent column, a very large front has to be covered. If the whole force of cavalry were spread out in a single line of small detachments, though it might prevent hostile patrols getting through by stealth, it would be powerless against penetration by even a small reconnoitring party using force. There must be supports for the farthest-out line of detachments, and a reserve for the whole line, so that force may be opposed by force, to the highest degree of which the protective cavalry is capable. It is more important to cover a large front, on which hostile bodies of considerable size must be detected and opposed, though hostile patrols may occasionally penetrate by stealth, than to concentrate attention on a much smaller front, making hostile penetration through it very difficult, but allowing the enemy to pass easily round the flanks.

The commander of the protective cavalry must weigh all the conditions of the problem, and make the dispositions which will be best as a whole. At one time, the conditions may require extra dispersion, and an approach to a cordon system, for

example, when there is little fear of meeting considerable hostile bodies, but patrols or small parties are numerous. At another time, the main body of his command must be kept large in order to use force. As our cavalry training puts it:—“Whether the objective be to protect or reconnoitre, the commander of every body of cavalry must always be prepared to fight.” As a general rule he should keep half or more of his whole force under his own hand. The front to be covered may then be divided into as many sections as necessary, and allotted to separate units. These units will in turn divide up their fronts to smaller detachments, which they will send forward, keeping back at least half their strength as a support.

Now it is evident that all the farthest-out detachments, except one, must follow lines of advance on either side of the road, by which the main column is marching. Sometimes they will be able to use side roads for a portion of their march, but at others they must strike across country to avoid too much distortion to the general disposition, and the creation of serious gaps in the line of protective observation. The supports, except the central one, will have to do the same.

The remainder of the protective cavalry, namely what is left of the cavalry, the mounted infantry, the horse artillery, and any specially attached units, will follow the main road, and form a reserve. The support of the central section of the

line of protective observation will form the advanced guard of this reserve.

The order of march of the reserve will vary in accordance with existing conditions, but it is important to keep at least the mounted troops in front of the artillery, to prevent it being surprised by a sudden cavalry attack; and there will be less warning when this comes from the front than when it comes from a flank. Troops in front of the artillery also, to a certain degree, help to guard it from being surprised on the march by hostile artillery fire.

The intervals between the units of the protective cavalry as a whole will vary greatly with prevailing conditions, and will depend on the strength of the protective cavalry, and the front which it is necessary to cover.

No rule can be given for the extent of this front. The greater it is, the further the enemy's reconnoitring bodies have to go to get round it, and then converge on the road again to observe the bodies lying behind the screen. Consequently, the information gained will take a longer time to reach hostile headquarters, and will lose in value. The features of the country will often help to limit this front. For example, the crossings of a river to the flank and more or less parallel to the line of march, may be held by a defensive screen, till the main column has passed, and no protective reconnaissance beyond it may be necessary. The action

and position of the independent cavalry, and those of any flank protective guards, may influence its extent.

The wear and tear on the protective cavalry increases with the front covered, so there comes a point beyond which the screen cannot be stretched, and precautions must be limited to tactical reconnoitring.

There is, without doubt, a tendency in the case of a single column, working independently, to restrict the protective front dangerously, making it easy for the enemy's patrols and larger detachments to get round its flanks to reconnoitre and do damage. When the protective cavalry is far in advance, it is almost impossible, except when suitable features exist, to connect the extremities of the protective cavalry screen with that of any flank protective guard.

If the screen stretches for ten miles on either side of the road, it will form a serious hindrance to useful hostile reconnoitring, but the protective cavalry must be strong to maintain such a line, and great exertions will be necessary in the detachments on the flanks. If it stretches only three or four miles on either side, the enemy will lose little time in getting round the flanks. Even with a big front, the flanks will be occasionally turned, and some hostile parties will get through the screen, so the work of the protective cavalry must be supplemented by a more local system of screening.

We must also, now-a-days, remember that the whole of the dispositions of the protective guard are useless against reconnaissance by flying machines. An aeroplane reconnoitrer can find out more in an hour, with ease, provided the weather is suitable, than many reconnoitring patrols can in a day, with an expenditure of their utmost efforts. If the enemy is strong in aeroplanes, and is able to use them, and the occasions when this cannot be done are rapidly diminishing, it would appear to be of very small importance, if we have no way of stopping their reconnoitring, if a few of his mounted patrols do succeed in passing the protective screen. Under such conditions it would appear desirable to devote our principal efforts to stopping larger hostile bodies from approaching the advanced guard, or the main body, namely such bodies as are capable of doing material harm. If we are also strong in aeroplanes, the protective cavalry would probably be kept very concentrated but, if not, our tactical reconnoitring patrols would have to be increased in number.

Owing to their mobility the distances between detachments of mounted troops, used for protection, can always be greater than in the case of infantry. The distance of the protective reconnoitring detachments, in front of the reserve of the protective cavalry, should seldom be less than three miles, so as to prevent the latter being surprised by hostile artillery suddenly opening fire on it.

Their distance from their supports would generally be about a mile in fairly open country. As the protective cavalry will generally advance by "bonds successifs," its distance from the advanced guard must constantly vary. When there is danger of its being rushed at night, it will generally rest behind the outposts of the advanced guard, and it is far less wearing on it to have to march back some way to do so than to expend a great amount of energy in securing itself at rest in an isolated and dangerous position. This falling back on the outposts cannot be carried too far, so where there is a necessity for doing so, the distance of the protective cavalry must be limited accordingly.

In addition to its purely protective duties, the protective cavalry has, in advance of its own protective dispositions, to search for the enemy and try to find out all about him, generally when he is fairly close. This forms the introduction to what is called in our regulations "tactical reconnaissance."

The advanced guard is protected from surprise by the protective cavalry, but this protection is more in the nature of information than in that of resistance. Cavalry is an arm with considerable limitations as regards protracted resistance. It has been called the most "unstable" of arms. Its nature is essentially offensive, and its defensive powers are undoubtedly inferior to those of the

other arms. Its action is sudden and lasts but a short time. The crisis of its engagement is quickly reached. Its mobility gives it the power to escape, frequently denied by its slowness to infantry, which may have to resist whether it likes to do so or not. If cavalry works by fire action, the number of rifles it can use is relatively small, and it is harassed by the presence of its horses, the safety of which gives rise to constant anxiety. There is no doubt that cavalry, when properly handled, can ensure a certain amount of delay, but this is not generally sufficient for large, less mobile bodies, protected by it, to do what is necessary to lay aside their unreadiness. In mountainous or very close country cavalry loses much even of its offensive value, and at night its utility is very small indeed.

For these reasons the advanced guard, when in movement, even though covered by the protective cavalry, should secure itself by infantry protective guards, in the directions of danger. But it is impossible for infantry detachments to march across country, or to follow side roads, which make considerable detours, without delaying the bodies they are securing, and themselves suffering from great fatigue. Thus, when it is important that the following troops should not be delayed, these protective guards of the advanced guard can only be detailed where roads suitable for their advance exist. Hence, in the majority of cases, there will

only be one protective guard for the advanced guard, namely that directly in advance of itself, and advancing by the same road, as suitable parallel roads, at a small interval, are seldom available, or may only lend themselves for use for a short distance. This limitation to one protective guard for the advanced guard, and the disappearance of efficient infantry flank protection must be accepted as a necessary evil, which is forced on us by movement, but we revert to a more thorough system whenever it is possible, which may occasionally be feasible in movement, and, as will be seen later, nearly invariably at rest. This protective guard, which thus precedes the advanced guard, is, in our regulations, called the "vanguard."

Similarly, when cavalry protection in front does not exist, or, for some cause, it is considered inefficient, for example in mountainous or very close country, or when the protective cavalry is far ahead, the vanguard may be preceded by a guard of its own to secure it from surprise. The Germans use it when the vanguard is strong, and call it the "point company." In front of the point company is the "infantry point."

The vanguard should be composed of an infantry unit or units, and its strength should be a convenient fraction of the advanced guard, generally not greater than a third or less than an eighth. As the protective cavalry's resistance is proportionately a more important quantity, when applied to the

delay required for a smaller body, such as the advanced guard, than it is when used in connection with the delay required for a larger force, such as the main body, it is permissible to make the vanguard rather a smaller fraction of the advanced guard, than the advanced guard is of the main body.

The cavalry required to perform the necessary protective reconnaissance of a local nature for the advanced guard, when the protective cavalry moves far ahead, as well as mounted men for orderly duty, should be attached to the vanguard, and to any other protective guard thrown out by the advanced guard. Its employment will be considered later.

It is generally advisable to have some engineers with the vanguard to start repairs on the roads, when necessary, as soon as possible. Special conditions may require their being strong.

In the case of a single column the vanguard will seldom be strong enough to justify any field artillery being attached to it.

The strength of what the Germans call the point company would generally be from one to two British companies, detailed from the vanguard.

The point would consist of a squad of men, under an officer.

The remainder of the troops composing the advanced guard march together, and are called in our regulations the "main guard." The main

guard is the general reserve of the whole protective disposition. The vanguard and any other protective guard, thrown out by the advanced guard, may be regarded as reserves to sections of the protective line or screen, formed by the protective cavalry.

Generally speaking, the distance of the vanguard from the main guard depends on the same principles as that of the advanced guard from the main body, but there is this difference, namely that the protective cavalry, which protects the advanced guard, as well as the main body, is a far greater factor in securing the slight delay required by a relatively small body, like the advanced guard, than it is in the case of a larger force, such as the main body. Hence the importance of the vanguard to the main guard, when protective cavalry is present, is not so great as that of the advanced guard to the main body.

The vanguard of a single column is necessarily small, and it will rarely exceed a battalion, but it is an important body, and the tendency to diminish it unduly, or to do away with it altogether, must be resisted.

If the main guard includes field artillery, it is very necessary to prevent its being surprised on the march by hostile artillery fire. We require some three miles clear in front of it for this. It will usually be placed in the column with a brigade of infantry in front of it, which is equal to about

three-quarters of a mile. Then there is the gap between the advanced guard and the vanguard, and, even when the protective cavalry is absent or has been driven off to a flank, there are divisional cavalry patrols a couple of miles ahead of the vanguard. If, then, this gap is a mile long, the cavalry patrols will still have time to inform the commander, at the head of the advanced guard, of the presence of hostile forces, before the artillery of the advanced guard can be surprised by hostile artillery fire. This seems sufficient to provide for the worst case. With smaller forces, when there is no artillery with the advanced guard, the distance of the vanguard must be such that the enemy cannot surprise the head of the main guard by effective rifle fire.

The German regulations lay down that the point company will be 400 or 500 metres in advance of the vanguard, and the point a slightly greater distance in front of the point company.

The column is thus protected partially by the independent cavalry, which reconnoitres and neutralises by force, partially by the direct protective guard, consisting of protective cavalry and advanced guard, which reconnoitres, tactically and protectively, and interposes forcible resistance. The action, however, of the latter is necessarily limited as regards the front of its resistance. If for the present we leave out the possible employment of secondary protective guards by the main

body, there is little to prevent small hostile bodies passing beyond the flanks of the protective screen, and then marching inwards on the column, to reconnoitre and do damage. Certain hostile bodies may also succeed in penetrating through the screen. Large hostile bodies can hardly expect to escape the notice of the different reconnoitring bodies, and special measures can generally be taken to intercept them, though in the form of well organised, quickly moving cavalry raids, they have frequently been successful. When the enemy is operating in his own or in a friendly country, the presence of such small hostile bodies will not be communicated by the inhabitants, and they will be able to use the telegraphic communications, which have not been interrupted, and which may be found at no great distance from the column. Second or third line military organisations, such as the German Land-sturm, which do not form part of the regular army, are able to cut in on the flanks of the column to reconnoitre and do damage. The whole line of communications, lying inside a hostile country, is subject to attacks of every description, great and small, and measures must be taken to guard it, but we are only concerned here with the protection of the column itself.

This form of annoyance to the column has been aptly expressed by the term "Insults." It is usually considered necessary to provide against

them, as far as possible, by a very local form of protection.

Patrols are detailed for the flanks of the column to look out for, and give notice of, the approach of such hostile "insults." If they are small, the patrols can drive them away, but if large, portions of the column will have to move out to oppose them. Individual units of the column must generally, when able to do so, provide in this manner for their own protection. These patrols may march parallel with the column and keep pace with it, or take up some position commanding an extensive view in advance and to the flank of the column or the particular unit they are guarding, and remain in observation till the column or unit has passed, then rejoining it, new patrols taking up points further in advance, and so on. In the case of stationary local protection of this nature, even if the distances to the flank are small, infantry will with difficulty be able to carry out the task, and much confusion in the order of march of the column will be caused. Infantry patrols, too, moving by side roads, generally indirect, will have much difficulty in keeping pace with the column, and their power of observing will be small. Cavalry, mounted infantry and sometimes cyclist patrols are alone really suitable for this task, on account of their extra mobility. They must be used when it is of importance that there should be no delay in the progress of the column. Conditions may

require that such patrols should be several miles from the flanks.

The advanced guard must not only protect its flanks from "Insults" of this nature, but it must also cover its front, when the protective cavalry is any considerable distance in advance. Each infantry protective guard, sent out by the advanced guard, should have some cavalry for this purpose, and their commanders must be instructed how the whole front is to be divided between them for this purpose. If the vanguard is the only protective guard of the advanced guard, as will usually be the case, the cavalry for this local protection of the whole front would come under the orders of its commander. Such patrols, generally speaking, should not be more than two miles from the vanguard or other protective guard thrown out by the advanced guard. This will give those bodies sufficient protection against surprise. It would appear advisable that the patrols for the local flank protection of the advanced guard should be sent out directly from that body.

According to the English and French systems, the mounted troops available for this all round local protection of the advanced guard and the main body, as well as for all orderly duties and any special missions, is limited to one squadron, or its equivalent in mounted infantry, per division, namely the divisional mounted troops. However sparingly such local patrols may be used, the

inadequacy of this allotment for a single independent column is at once apparent. The depth of a division on the march will not, under present conditions of transport, fall short of twenty miles. The whole local protective perimeter of such a force will be some fifty miles. It is true that, when secondary or flank protection can be, and is, used, there is not the same urgency for employing this local protection in certain parts, but it cannot be altogether done away with even then. It is a work that has to be carried on, to a certain extent, at rest as well as in movement. If a division is then to be limited to one squadron or its equivalent in mounted infantry, the local protection work must practically cease, or the unfortunate body of mounted troops will be worn out in a couple of days at the latest, even then performing the work in a most sketchy manner. The help it can receive from any cyclist detachments is a very doubtful quantity, as it is difficult to say where these are to come from. It is perfectly evident that for a single independent column the cavalry or mounted infantry for local protection must be greatly increased. At least two squadrons or three, if moving in a hostile country, (or their equivalent in mounted infantry) appear to be the possible minimum. Even then every message, which can be sent by roads, should be carried by a cyclist or motor cyclist, and every care should be taken to use technical means of signalling so as to economise

mounted orderlies. This is a matter which is generally totally overlooked. In an army consisting of many parallel columns this local protection will evidently be greatly diminished in the case of central columns, and considerably so in that of flank columns. The German organisation of one body of cavalry (divisional cavalry) to perform the duties of protective and divisional cavalries, which can be divided up according to the particular requirements of the case, appears to be better, though it has been pointed out by a German writer that, even then, this local protection is frequently neglected.

Chapter IX.

ADVANCED GUARDS (CONTINUED).

As regards the question of command, there are a few points on which it seems necessary to dwell, before proceeding any further.

1. The advanced guard and the protective cavalry may be under separate commanders, each directly under the leader of the whole column. This is the usual modern method.

2. The advanced guard and the protective cavalry may be under a single commander.

First Case.

The protective cavalry will be commanded by the senior officer of that arm, who is available, after the independent cavalry has been organised,

If the advanced guard consists of a self contained unit, such as a division, the general officer, commanding that division, would command the advanced guard.

In foreign armies, in which a division consists of two brigades of infantry and a brigade of two regiments, it appears to be usual to appoint the divisional commander, from whose division the

infantry brigade and the other troops are taken, to the command of the advanced guard, and should one regiment of infantry form the advanced guard, the brigade commander would have charge of it. This is laid down definitely in the Italian regulations for "Large Units in War" (Art. 31).

In the British service, where there are three brigades to the division, and four battalions to the brigade, the matter is more difficult.

If the advanced guard consists of one infantry brigade, besides some cavalry, artillery, engineers, etc., fully two thirds of the leading division will still remain with the main body, and it is inexpedient to take the general officer commanding the division from the greater part of his force to command one third of it, leaving two thirds without a staff or regular commander, possibly even during the battle which may take place. On the other hand, to entrust such an important mixed command as that of the advanced guard to a brigadier may have serious drawbacks. If a battle takes place, there is by no means any certainty that the rest of the division will join up with the advanced guard, so that the divisional general can quickly resume his whole command, and the commander of the advanced guard may have to retain control over the whole mixed advanced guard, during the battle. The co-ordination of his efforts with those of the protective cavalry, which may eventually have to take orders from him for their combined actions,

throws a further heavy demand on his powers. The available staff will not be sufficient, and the task may well be beyond what can safely be expected from a brigadier.

The presence of the leader of the whole column with the advanced guard, during the advance, will tend to check any serious initial error on the part of the advanced guard commander. Though there must come a time when the leader may have to leave the advanced guard to supervise the entry into action of the main body, the former will at least have commenced its engagement on lines which are in accordance with the views of the leader. Hence, in the case of the advanced guard containing a single infantry brigade, it would appear preferable to leave the command in the hands of the brigadier, provided the leader of the whole column can be present with the advanced guard on the march, and the staff of the brigadier can be increased to what is really essential for such an important mixed command. The whole question of extra staff for such detachments requires the most careful forethought, and it would seem advisable that every division should contain at least one extra staff officer for such duties. Brigadiers ought to be capable of commanding such detachments, so they should be thoroughly practised in this class of work.

If the advanced guard consists of two infantry brigades, the general commanding the division,

which supplies them, should always command the advanced guard.

The command should be given to the brigadier when half his brigade is in the advanced guard, and to the battalion commander when there is only one battalion.

Second Case.

In this case the command of the whole protective guard is of much greater difficulty. When there is a single infantry brigade with the advanced guard, it is possible that the commander of the protective cavalry may be senior to the infantry brigadier. If either the one or the other is an officer in whom the leader of the whole column has absolute confidence, he may be appointed to the command of the whole protective guard, provided he is the senior of the two and he is supplied with the necessary staff. Otherwise it would appear preferable to put the commander of the division, furnishing the infantry brigade, in charge, placing the senior brigadier of the other two brigades in command of them, supplying him with the necessary staff.

Similarly in cases where less than an infantry brigade forms the advanced guard, the brigade commander should generally be placed in charge of the protective guard.

There is a considerable difference of opinion as to the best position of the leader of the whole

column during the advance. Our regulations lay down that, when a battle is anticipated, he should be with the advanced guard. The German regulations, and most foreign writers, say he should normally be there. On the other hand, the Italian regulations for large units in war, lay down his ordinary position as the head of the main body.

The direct protective guard has a most important rôle to perform. Its engagement gives form to everything which follows, and a bad beginning will generally result in a lost battle. The action of the protective guard must therefore correspond to the views and plans of the leader of the whole column, but it also depends on the conditions existing when the protective guard becomes seriously engaged, and these conditions cannot possibly be foreseen altogether by the leader. However carefully he may explain his intentions to the commander of his direct protection, he can only lay down rough guiding principles for the action of his subordinate under assumed conditions, which will frequently prove to be wrong. The commander of the whole protective guard, or, when protective cavalry and advanced guard do not form a single command, the commander of the advanced guard, which is the real resisting portion of the protective guard, will thus often be faced with a problem which he is doubtful how to solve. Brought up under a régime of "initiative" and "offensive action at all costs," he will probably, and very rightly, adopt

those principles. He certainly has no time to ask for orders, when the leader of the whole column is far away. His action may be correct or incorrect, but whatever he does has the most far reaching consequences on the whole force. The fate of the army is thus dependent on the rapid decision of a subordinate, who, in making it, has to take into consideration not only the effect on the detachment under his command, but also that on the whole force. We can imagine the feelings of an infantry brigadier, in the unaccustomed position of having artillery and other arms to command, and who is endeavouring to co-operate with the protective cavalry, when he finds that the conditions are something totally different from what he was led to expect by the leader of the whole column, when he received instructions, or that he is incapable of carrying out the line of action indicated to him. He knows, too, that every thing depends on his instant decision.

Even to the more experienced divisional commander, who is provided with a sufficient staff and accustomed to manœuvre all arms, the situation is an intensely difficult one.

When the leader of the whole column is with the advanced guard, this difficulty is avoided. He is enabled to give an initial direction to the main action of the protective guard, according to the existing conditions, which enables him to form a plan of operations embracing the action of his whole force, or to introduce modifications, if ne-

cessary, into any plan which he has already evolved. He can settle his plan or the necessary modifications at once, if the information to hand is sufficient, or he can wait till the action of the protective guard has further developed the situation.

It is very important that the leader should be in a position where he can receive the earliest possible information of what is happening in front. Even with every use of technical forms of intercommunication, much information will necessarily be sent in by mounted orderlies, and there can be no doubt that he is in a better position for this when with the advanced guard than when at the head of the main body.

When very large forces engage in battle on a very extensive front, it is generally impossible, under modern conditions, for the leader to carry out a personal reconnaissance of the whole future battle field, and a knowledge of a limited portion of it may be disadvantageous, as it will tend to concentrate his attention unduly on that portion. His knowledge should be gained from a study of maps, and from the information he receives from reconnaissance. But when the forces are not large, as in the case of a single column, a personal reconnaissance of the limited front is possible, and it is of very great importance that the leader should grasp at least its main characteristics. It is only when he is well forward with the advanced guard that he will have a chance of doing this, before

committing his command to some plan. The time does not seem far distant when we may expect to see the leader personally reconnoitring, even an extensive front, from an aeroplane, accompanied by an escort of other flying machines.

Against such advantages it may be urged that the leader, if with the advanced guard, must unduly interfere with the initiative of its commander, and that he may be cut off from the possibility of commanding the more important portion of his force, namely the main body. As it may involve the whole force, this initiative, as has been shown, must be at least directed in the right channel and a good leader can surely be trusted not to harass his subordinates unduly. The second point is undoubtedly of some importance, though the contingency is not a very probable one. In case the connection between the two is severed, it is the first duty of the main body to establish it again by force. Even if the leader is with the main body, it will be very difficult for him to establish a plan of action for the whole force, till he knows what is happening to the advanced guard. Until the engagement of the advanced guard has lasted some time, it is most unlikely that any important hostile force could get between it and the main body. The interruption will probably only be a temporary one, caused by hostile cavalry which can be driven off, without much difficulty. It is also possible that the main body may unexpectedly be attacked

during the absence of the leader, though this is not at all probable except in the form of "insults." In order to meet such cases, the leader can appoint a commander of the main body, during his own absence. The German regulations lay down that this should be done (F.S.R. 364).

Taking all these facts into consideration, it seems highly advisable in the case of a single column, where the forces unarmed cannot be very large, to place the leader with the advanced guard on the march. The smaller the force, the quicker the development of the engagement, and the more important that the leader should be well forward.

If the leader cannot, or will not, march with the advanced guard, it is evident that the commander of that body must be absolutely in his confidence as regards his intentions. Information already received may make it possible for the leader to issue guiding instructions to the commander of the advanced guard, which will prevent any serious complications, but it is justifiable to think that this will be rare, as the unexpected nearly always occurs in war.

A system has crept into our regulations of making the commander of the advanced guard responsible for the distance of his command from the main body. This would appear to be carrying the idea of not interfering with a subordinate's initiative to an excessive extent. This distance is a most complicated matter, as has been shown,

and depends on a great many things of which the commander of the advanced guard can really form no conception. If the main body were an inanimate mass, which simply had to be defended, the matter might be left to the guard commander, but we have seen that on this distance hinges the action of the whole force, and only the leader of the whole column is in a position to say what it should be. If the commander of the protective cavalry is not under the commander of the advanced guard, it is quite possible for the utmost confusion to result, if the distance is not indicated by the leader, for, presumably, the former would enjoy the same privilege as the latter.

It is a somewhat curious point that in our regulations the commander of a protective body at rest is given no such latitude.

As the action of the protective guard is the introduction to the action of the main body, it is evident that it must be regulated on what the leader has determined to do with the main body. At the same time it must be remembered that the leader may not be in a position to form a plan of action for his main body, till the engagement of the protective guard has supplied him with the necessary data.

The defensive should be regarded as a deferred offensive, that is, it must contain the idea of an eventual offensive, either from within the force itself or by some other body which will arrive

later. The object of the defensive is to gain delay, or compel the enemy to "use up" his strength by excessive efforts, before the offensive is adopted against him. In nearly every battle a combination of the offensive and defensive will be used by both sides, and this will particularly be the case in encounter battles. The side on which the offensive predominates over the defensive is acting offensively and *vice versa*. If one side uses the defensive in one place, it can still act offensively as a whole, and this is the form its offensive engagement will assume when a protective guard is employed to gain the necessary delay, for the entry into action of the main body.

One of the duties of the protective guard, on the march, is to push back minor opposition by offensive action, so that the main body may not be delayed, but however strongly its commander may be imbued with an offensive spirit, there comes a time when the opposition gets too strong for him, and he must adopt a defensive attitude. The advanced hostile detachments will always be falling back on something stronger. Most writers and regulations would limit his offensive to occasions, when he knows that the hostile opposition is so weak, that it is not able to resist his attack with success. It is, of course, possible that he may be so well informed by his reconnaissance that he does know this for certain, but the chances seem to be that it will be very hard to do so, with-

out actual trial. Great difficulty undoubtedly lies in judging when the offensive action of the protective guard should be converted to a defensive one. If this only takes place after an offensive effort has failed, or is proved in the course of the attempt to be too weak, the protective guard will not be in a favourable position for carrying out a protracted defence, for its dispositions will be of an offensive nature, and the ground will not have been selected for the purpose of defence. The hostile counterstroke, if quickly delivered, is then apt to lead to the speedy defeat of the protective guard. Nor is it easy under such circumstances to start a fighting retirement, as the rival forces will be at close quarters, and the protective guard, or at least the advanced guard portion of it, will probably be "fixed."

As has been seen in Chapter v, when the odds against them are proportionately equal, the holding out power of a large force, say an army corps, is very much greater than that of a smaller force, say a brigade. A large force, in using the offensive, retains a great depth of formation, lasting long into the engagement, while a small force quickly loses the little depth it has, and ceases to retain the powers of changing to a well considered defensive.

The former has the power of forcible reconnaissance, with the possibility of a subsequent effective defence, and this is absent in the case of the latter. Hence large protective forces, can well embark on

a line of action, which may not be suitable for smaller ones.

If the protective guard of a single column, by excessive caution, causes delay to the march of the main body, or the leader orders its deployment when there is still no necessity for this, the harm done is not nearly so serious as in the case of a large army of many columns, where a false manœuvre of the main body, the result of acting on insufficient data, may cause the loss of several days.

If the weak protective guard carries its offensive too far, the whole attention of the main body may have to be devoted to extricating it. The position will always be critical, and the different units of the main body will have to be rushed into action as they arrive, wherever the need is greatest; there will be no leading principle in the conduct of the battle. The superior strength and delaying power of the defensive must be utilised by the protective guard, either in the stubborn defence of a favourable position, or in a fighting retirement.

It is the necessity of forming a correct judgment as to how far offensive action can be carried, that makes it so important that the leader should be with the advanced guard.

There can be little doubt that where the protective guard is small, far more caution must be used, as regards the extent to which offensive action is carried, than when a large general advanced guard is employed for several columns.

The commander of the protective guard, or of the advanced guard portion of it, must be constantly on the look out for positions, which he can occupy for a stubborn defence, or for the starting off point for a fighting retirement.

In certain cases, such as when the enemy is retreating, it may clearly be the duty of the protective guard to use the offensive to the utmost, so as, at least, to fix the enemy till the arrival of the main body. The offensive may be indicated, when contact takes place with the advanced guard of an army, which is known to be no better, or even less, prepared to come into action than our own is, or advantage may be taken of the greater state of exhaustion of the enemy's forces.

When using the offensive, it is most necessary for the commander to keep his forces particularly well in hand, for there is always a possibility, and eventually the certainty, of his being compelled to adopt the defensive at very short notice.

The action of the protective guard, within itself, will be guided by the same principles. The vanguard and other protective guards of the advanced guard, if they exist, will, in co-operation with the protective cavalry, drive away such minor opposition as they are able to do ; they will supply the necessary delay for the main guard to come into action offensively to the best advantage, if considered advisable, or to take up a defensive position, if the opposition is judged to be too strong.

They will often have to fall back on the main guard in the face of stronger hostile forces, hence their commanders must endeavour to retain the power of doing this so as not to involve the main guard in an undesirable engagement, in attempting to extricate them. In falling back they must clear the front of the main guard.

The mobility of the protective cavalry, will usually prevent its irretrievable entanglement, even where used offensively. Its action must be elastic, and there is generally no necessity for it to defend any position, except very temporarily, after the manner of a fighting retirement. Its commander will use the offensive or the defensive, according to his opportunities. He must make every effort to continue the reconnoitring and screening, and must remember that he is not only screening the advanced guard, but also the main body. He must leave free the front of the position taken up by the advanced guard in time to allow of the full use of fire from it. His subsequent action will depend on what the decision of the leader is as regards the action of the main body.

If the independent cavalry has been successful in defeating the enemy's independent cavalry, it will probably, at this stage, be on the enemy's flank, endeavouring to obtain information, and to harass the hostile forces to the best of its ability. If it has been unsuccessful, and has sought refuge with the advanced guard, it will have

to second the efforts of the protective cavalry. The two combined may have to endeavour to defeat the enemy's cavalry by drawing it into positions where assistance can be given by the infantry or artillery.

The leader of the whole column, if he has not already made up his mind as to what he is going to do with the main body, must do so shortly after his advanced guard is faced by hostile troops, against which it can no longer advance. The courses open to him are :—

1. Retreat.
2. Attack.
3. Defence.

Retreat.

To enable the main body to retire, the protective guard should still be in a position where its own retreat is possible, that is, it must not be already exhausted or fixed, or, if it is heavily engaged, there must be some favourable condition, such as night or the greater exhaustion of the enemy's troops, which will allow of its disentangling itself. The action of the protective guard will then take the form of a fighting retirement. It becomes a rear guard, the handling of which will receive attention later.

Attack.

If the leader settles to attack, there are two alternatives open to the protective guard :—

1. A defence, approximately where it is.
2. A fighting retirement.

1. *Defence of the protective guard.*

As already explained, the action of the protective guard may be at first offensive, but this will ultimately be converted into the defensive.

The objects of such a defence are to delay the enemy and to attract as much hostile attention as possible, so that the enemy's dispositions may be disturbed to the utmost. Within the protective guard itself no change on a large scale is required from defensive to offensive action, the latter will be effected by the main body. This must not be held to exclude local counter-attacks, when favourable opportunities occur, or a general offensive, later on, after the main body has come into action, should it then be possible. The strongest available position should be taken up, and every endeavour made to strengthen it, by entrenching, as far as time allows. The great danger will always be from flank attacks, and the reserves, at first kept back, will have to be used generally in prolonging the line where necessary, or in attacking in flanks the hostile forces attempting these flank attacks. The defensive front of a protective guard is nearly certain to be very long in proportion to the size of the force, but there must be a limit to this extension, or the front will be penetrated, which will be even more serious than the

outflanking of the force as a whole. It may even be necessary to throw back the flanks, and this is often less objectionable in the case of a protective guard defence than in that of a complete force, for we assume that the main body will arrive in time to prevent the destruction of the protective guard. A course of action, which in an entire force must be avoided at all costs, as leading up to its being surrounded, cut off from the possibility of retreat, and, in time, forced to surrender, may be adopted in the case of a protective guard, where the intervention of the main body prevents the hostile plan being carried to its conclusion. The protective guard should leave out of consideration measures for its own extrication, provided it can gain more delay for the main body by doing so.

If a position can be selected where the flanks rest on strong *points d'appui*, or natural obstacles the defence will be much facilitated. Even one strong flank will greatly help matters.

The defence will assume a very mobile form, when it is a question of preventing the enemy crossing a considerable river, or debouching from several defiles. The protective guard must specially endeavour to oppose the passages of the principal hostile columns.

The protective guard will often be called on to seize favourable positions in advance of some defile, so as to cover the passage of the main body

through it. It may reach these before the enemy and have time to entrench them strongly for defence, taking up a position in readiness to act in accordance with whatever line of approach the enemy may adopt.

If the enemy declines to attack the protective guard in its defensive position, and continues to advance past a flank, he must be attacked in flank by the protective guard. If in doing so he has left a force to contain the protective guard, it can be attacked, if not too strong. If too strong, the commander of the protective guard will at least have the satisfaction of knowing that he is occupying the attention of superior numbers, and is disorganising the enemy's forces, thus facilitating the task of his main body.

In the defence of the protective guard the enemy will undoubtedly eventually have great superiority in infantry and artillery, but there is no reason why his cavalry should be stronger. It may, or it may not, be so. If it is, the difficulty of the protective guard's defence will be greatly increased. A victorious cavalry will enable the enemy to work round the flanks very quickly, threaten the protective guard in several directions, and cut off its connection with the main body. On the contrary, the defence will be greatly facilitated, if its cavalry is superior, as all the enemy's movements will be more difficult from the uncertainty in which they will have to be made.

The pivot being thus established by the protective guard, the main body will proceed to its offensive manoeuvre, as already explained. When it diverges from the road, in one or more columns, a new advanced guard or guards must be thrown forward to protect the individual columns. The protective cavalry will do its utmost to screen the advance into action of these columns, and keep the leader informed of what is going on in front. The independent cavalry, if inferior to that of the enemy, will have to assist the protective cavalry in this task ; if superior, it will continue to hang on to the flank of the enemy's main body, threatening his movements, and ascertaining what it can of his dispositions. The leader of the whole column, if with the advanced guard when the pivot is established, will probably have been in a position to issue instructions for both the independent and protective cavalries, so that they can be worked to assist his general plan of action. The position may make it necessary for the protective cavalry, if it forms a single command with the advanced guard, to be placed again directly under the orders of the leader, as it may be inadvisable that it should be too much tied to the defence of the advanced guard.

The critical position of the defence of the protective guard may make it essential for the leader to send it direct assistance, to enable it to hold out for the necessary time, but it must be remem-

bered that every man thus detached to assist in this defence will weaken the offensive of the main body, and tend towards converting the action of the column, as a whole, into a defensive instead of an offensive one.

2. *Fighting retirement of the protective guard.*

The retirement can be carried out straight back or at an angle. In the first case, the main body will have to undergo a certain amount of displacement, in order to be in a suitable position for assuming the offensive, when it has closed up. All the courses of action, which the offensive can adopt when the protective guard stands to fight, can equally well be practised in this case. In the second case, the main body can get ready for offensive action, at or near its head, and it is evident that less time will be required for this.

In both cases, the protective guard endeavours to draw the enemy on into a position where the leader hopes to attack him, with the main body, under favourable conditions. Here again it is expected that the protective guard will attract an undue amount of hostile attention to itself, thus disorganising the enemy's dispositions, and, possibly, the general direction of his advance.

If it is found that the delay being gained by the protective guard is not sufficient for the main body to get ready in time, then the former must turn at bay and stubbornly defend itself at some inter-

mediate position, which will thus become the pivot for the manœuvre of the main body. By such a course the protective guard will gain more time for the main body than if it originally stood to fight, but the space required for the main body's manœuvre will be more cramped. This want of space will not be of so much importance if the protective guard has retired at an angle and the main body prepares for offensive action near its head, as it will be when the retreat has been straight back, and the main body has had to get ready to attack some distance to a flank.

The falling back for some distance, and then standing to fight, will often allow of the protective guard gaining a much stronger position for defence than if it originally stood to fight, and an inferior defensive position is forced on it. This fact will often be the reason for adopting such a preliminary retirement.

A retrograde movement, when pressed by the enemy, is always a difficult task, which increases with the size of the force concerned. It gives rise to a feeling of inferiority, which may seriously affect the *moral* of troops unaccustomed to war, or who have not yet gained confidence in their commander. Many other matters will doubtless influence the leader as to which course of action to adopt, and among these may be noted the strength and dispositions of the enemy as affecting the holding out powers of the protective guard; the

nature of the ground as to its suitability for the defence of the protective guard and the attack of the main body ; the delay and space required, etc.

The management of the protective guard in a fighting retirement of this nature resembles that of a rear guard, which will be considered later, but there is always this difference, namely that the commander knows that he is falling back on support, and this should inspire him with more confidence. If he does hold on too long in a position and gets "fixed," his position is by no means desperate, as with a rear guard. Though this must naturally be avoided, as disorganising to the leader's plans, help may be confidently expected. The retirement, too, is always over a limited distance, namely till the main body can come into action, and then the commander of the protective guard can turn about to fight stubbornly.

The questions of the action and command of the cavalry and of the tactics to be employed, if the enemy passes by the protective guard, may be solved in the same manner as when the protective guard stands to fight, from the first.

It is very advisable that, when retiring, the flank of the protective guard, which is further from the main body, should follow a line where it will be difficult for the enemy to outflank it on account of some obstacle, for it is very important that the protective guard should not be driven back straight on to the main body. Hostile efforts to turn the

inner flank will have a tendency to place the enemy in an unfavourable position as regards the offensive action of the main body.

We can see how numerous are the courses of action open to a protective guard, even when the leader of the whole column is determined to act offensively with the main body. Whatever the protective guard does must also deeply influence the dispositions and movements of the main body, and consequently the whole form of the future battle. It seems impossible to foresee, before the march begins, what will be the best method of using the protective guard. If the leader is not with it, he must be at the mercy of its commander, as the most detailed instructions will generally be quite valueless.

Defence.

If the leader, for any reason, considers that he would not be justified in at once assuming the offensive, he may determine to take up a defensive attitude with the main body. It is evident that, once the enemy is in serious contact with the protective guard, and in superior strength to it, this position must be in rear of that body and that, if the position is to be entrenched, the main body should arrive there before the protective guard. Wherever it is, whether between the main body's head and the protective guard, or further back, the protective guard must carry out a fighting retire-

ment right back to the position. It cannot allow itself to be "fixed" on the way, or two lines of defence will be formed. It will constitute a successive application of force in a strategic sense, and the almost inevitable result will be the defeat of the protective guard, which will then be driven back in the greatest disorder on to the main body's position, closely followed by the victorious enemy. The fire from the main position will be masked, and the utmost confusion caused.

The difficult question arises of how the protective guard should best enter upon the defensive position of the main body.

1. It can fall in on a flank.
2. It can fall in on a central position reserved for it.
3. It can pass through and become the reserve or part of it.

If it falls in on a flank, the dispositions which the enemy has made to get round its outer flank on the march will serve to outflank the whole defensive position, that is, it arrives in position already outflanked. Its fighting retirement will have entailed very great exertions, but, instead of getting a light task in the whole defence, it will probably have the hardest. If the main body has time to entrench, it is very difficult to prepare a position for it, as the distances involved will be considerable.

If it joins the main body in a central position, the pressure on its flanks will have ceased before it

arrives, as any hostile outflanking columns will have been brought to a halt by the presence of the defensive troops, already in position. These, also, by their artillery fire, will be enabled to give much assistance to it, preventing its getting pressed as it is taking up its position. It is easier to prepare a position for it beforehand, as several units can assist without going very far. Its task will probably not be so severe as on a flank. On the other hand, a protective guard, carrying out a fighting retirement, is not altogether master of its line of retreat, as the outflanking movements of the enemy may influence this. It may consequently be thought difficult for it to hit off exactly the space left for it.

It may be easier for it to pass through the defensive line. This, however, may tend to mask the fire of the main position, if the protective guard is hard pressed, but the existence of a defensive position, already occupied, will doubtless tend to limit this pressure, as it is approached. The enemy will want to find out something more about it before he attacks. The protective guard, after it has passed through the defensive line, will have an opportunity of getting some rest, before its services are again required. The exertions demanded from a reserve, when the defensive changes to the offensive, are often very severe, especially in the case of a large force, and it seems somewhat doubtful if the protective guard will really be fit

to sustain them, except perhaps in a small force, where the distances are not great. A protective guard is not a very suitable proportion of the whole for a reserve, unless the defence is of a very passive nature.

In considering the whole question, it must be remembered that a position should not be taken up arbitrarily. As our regulations now point out:—

“The preliminary measures should be based upon as thorough a reconnaissance as is possible of the area which the plan of operations makes the most suitable for accepting battle. Though the extent of ground actually held, when the direction of the enemy's advance is definitely known must be strictly limited by the numbers available, the extent of ground reconnoitred and prepared for occupation may be much larger, and should admit of various alternative distributions of the force to meet the various courses of action open to the enemy.” (F.S.R., Part I, 108).

The fighting retirement of the protective guard is the principal means by which the direction of the enemy's advance will be definitely known, and the final dispositions of the main body will only be made shortly before the protective guard arrives. Hence the difficulty of reserving a central space for the protective guard is not so great as might appear at first sight.

There may be reasons for adopting the first or last course mentioned, under particular conditions, but it would appear that the second course is generally to be preferred.

Chapter X.

THE GENERAL ADVANCED GUARD.

THE idea of using a single or general advanced guard to cover an army, moving in several columns, is by no means a modern one. Napoleon, in many of his campaigns, undoubtedly employed this means of security, and his example was occasionally followed by his opponents. Von Clausewitz, who wrote his celebrated work "On War" before 1831, and whose teaching is based on Napoleonic methods, devotes some attention to the general advanced guard, but it is said to be questionable whether he really grasped the theory of its employment.*

* Von Clausewitz deals with the matter as follows:—

When an army is moving in several columns it may have a protective guard, under a single leader, in common for all the columns, or each column may have one detached from itself. When a large unit, such as an army corps, is detailed for the protection of the central mass or main body, its unity, as a fighting instrument, should be maintained. This does not mean that it must march by only one road, because its rapid deployment for united action, as a single force, may be better secured by allotting to it several contiguous roads to march on, provided they are close enough together. The columns of the main body or central force, which are following the same roads, as are used by the different units of the corps which forms the protective guard, are fully covered, and require no other special protective force in that direction. Columns of the main body and flanking columns,^a which are on roads outside those followed by the

After Waterloo the idea appears to have fallen into disrepute, or more likely, was forgotten, together with many other lessons to be learned from Napoleon's campaigns. The Prussian General Staff, under the leadership of Von Moltke, closely studied the methods employed by Napoleon, and many of them were used in building up their war doctrine, due regard being always paid, in doing so, to their national organisation and characteristics, as well as to changes in the size of armies,

corps which forms the protective guard, must provide special protective guards of their own.

When the unit covering the main body or central force is relatively large, it may be regarded as a protective guard to the whole army. The special protective guards, detailed by outlying columns, are tactical dispositions, but the unit guarding the centre is more in the nature of a strategical disposition.

The reasons for giving the centre a stronger protective guard than to the outlying columns are:—

1. The density of the army is usually greater at the centre.
2. The central line of the area over which the army is moving is always most important, as the majority of combinations relate mostly to it, and the field of battle is likely to be nearer to it than to a wing.
3. The central large protective guard flanks the lesser special protective guards, and in most cases protects them from serious attack, as it threatens the enemy moving to such attack in flank and rear.

The purposes for which the general protective guard may be used are:—

1. To ensure a stouter resistance, and make the enemy advance with more caution.
2. When the central mass of the army is very large and unwieldy, to allow of its remaining at some distance from the enemy, while keeping close to him with a more movable body of troops.
3. To reconnoitre the enemy though the main body, for some reason, remains at a distance.
4. To pursue the enemy, as it can move quicker than the unwieldy main body.
5. To keep the enemy at a distance in a retreat, as the centre line is then exceedingly important.

A special corps, or general protective guard, should always be used, when it is necessary to fulfil one of the above purposes.*

and improvements in methods of transport and intercommunication. The doctrine of the general advanced guard was not adopted by them, and it must be presumed that this was deliberate. Instead of it the Germans substituted another, namely that the fullest security and freedom of movement, compatible with modern conditions, are procurable by the use of the "Army Cavalry," (our independent cavalry) often far in advance of the main body columns, which are given local or tactical advanced guards only.

During the last twenty-two years new interest in the question has been awakened on the Continent through the investigations of the French General Staff, as regards the methods of war employed by Napoleon. The principal interpreters of his protective system are, perhaps, Generals Bonnal and Foch. The former has published a series of historical works under the general title of "*L'esprit de la guerre moderne*," in which much attention is devoted to this subject, both in the analysis of wars in which Napoleon employed the system, and in its application to more recent campaigns, in which other methods were used.

The French Field Service Regulations do not deal with the question of the general advanced guard, but French military opinion generally accepts the idea, though in the last two or three years there has been a considerable reaction against it in favour of supporting the independent cavalry

by a number of small "mixed detachments," or of making an uncompromising offensive on a pre-conceived plan take its place.

The British Field Service Regulations, 1909, introduce the idea very cautiously, and a few references may be found to it.*

The Italian Regulations for "Large Units in War," 1910, which contain the latest authoritative pronouncement on the subject, allow of the use of a general advanced guard, under certain conditions, in addition to the independent cavalry, the two occasionally forming a single command.†

* "The strategical concentration must be completed without interruption from the enemy, and a suitable force to ensure this must be despatched first. This will usually be composed of cavalry, but the preparation of ships to carry large numbers of horses takes time, and in cases of urgency the first infantry brigades mobilised should be embarked with the divisional cavalry of their divisions." (F.S.R., 22.3.)

"When it is desired to strengthen the first line of protection, for example, in order to cover the advance of a number of columns through difficult country, one or more mounted brigades may be attached to a division, or a mounted brigade may be temporarily strengthened by the addition of field artillery and infantry. The body so formed is called a strategical advanced guard; a commander for it is appointed, and its composition and duties are determined by the authority who orders its formation. A strategical advanced guard is normally formed for a specific purpose, and its composition is not changed daily as is usually the case with a tactical advanced guard." (F.S.R., 65.6.)

"When approaching the enemy, unity of action becomes important, the force moves on a narrower front and a single advanced guard detailed from a complete unit is then usually preferable for the protection of the larger units (divisions, etc.)." (F.S.R., 66.1.)

† "16.—In order to overcome any strong hostile resistance, which may have stopped the cavalry masses, or to keep off an enterprising enemy, who may threaten a systematical concentration, an army can sometimes be preceded by a large unit, such as an army corps or division, called the general advanced guard. The essential duty of this body is to gain contact with the enemy, reconnoitre him and oppose him, during the whole time taken up by the manœuvres, which are ordered by the commander-in-chief and which precede the battle."

In battle one of the primary conditions of success is that the leader's will power should dominate that of his adversary. A determination to use the offensive is not its adoption. A mere advance does not constitute initiative. Initiative is will power combined with a state of readiness sufficient to carry it into effect. If, at the beginning of the battle, he is less ready than his opponent, he must be able to take measures to increase his readiness. The procedure he adopts in battle must be founded on a plan, however general in character, for without one he is certain to be overcome by the necessity of the moment, and have to suffer the adversary's will.

"17.—This body is not necessarily placed on the principal line of advance. It must be where it will best satisfy the requirements which have necessitated its being formed. In many cases, for example, when it is possible that an enemy may be encountered, who is in greater strength, already in position, or well arranged on an extensive front, allowing of a simultaneous entry into action of superior numbers, it may be better not to have a single general advanced guard, but several weaker advanced guards."

"18.—The commander-in-chief must settle whether the exploration (independent) cavalry is to be under the orders of the commander of the general advanced guard, provided of course that he is senior to the cavalry commander."

"It will generally be better to make the cavalry independent of the advanced guard commander, and to insist on frequent intercommunication between the two, as well as between the cavalry and the main body. Under such conditions information, which has been collected, will be able to reach in good time all commanders who should get it, and the commanders of large cavalry units will always know the movements of troops in rear, actually made or contemplated."

"34.—When an army is protected to its front by a large unit such as an army corps or division, namely a general advanced guard, pushed forward in support of the exploration (independent) cavalry, the different columns can, provided the ground permits, slightly reduce the strength and distance of their particular advanced guards, or use only simple security detachments."

Information of the enemy at a distance is necessary, so that the general direction of the march of the main body and other arrangements, clearly strategical in nature, can be made while there is still time, but to enable a leader to form or complete a plan of battle, which will really best meet the conditions with which he is faced, and not be merely a hard and fast preconceived idea, he requires information, not when the enemy still retains the full power of altering his dispositions for battle, but when these are crystallised or fixed to a considerable degree, that is when a material portion of the hostile army is occupied with something, namely a force, that demands serious attention, and which cannot be shaken off.

The execution of the leader's plan requires that this disturbing effect on the enemy's dispositions, this crystallising or fixing, should take place at such a distance that the main body is free to execute the manœuvre, which is the expression of his independence of will power. In Chapters viii and ix, the manœuvre of a single and isolated column has been discussed. That of an army moving in several columns is similar in form, but of a far more complicated nature. The leader does not want to be compelled to move his several columns into battle straight to the front, as this will seldom be the best disposition. He should be able to shift the whole main body to the right or left, or some columns to the right and some to the

left, while leaving his protective force to its own resources; or, while reinforcing the protective force, to carry out similar movements with what he has left. This strengthening of the protective force may be necessary before that body has the power to find out enough to allow of the formation or completion of a plan, or the manœuvre, the essence of that plan, which the main body has to perform, may take so long that the protective force cannot hold out for a sufficient length of time without direct support. But it must be remembered that the greater this reinforcement, the smaller the force which remains for the manœuvre, and the more defensive in form becomes the action of the army as a whole, and, consequently, the less power there is of resisting the tendency only to conform to the action of the enemy.

A zone, sufficient in depth for the manœuvre, is necessary, and this sufficiency means that the columns must be able to move to right or left, free from hostile opposition, till they come into action in the required place and manner. They must not pass so close in rear of the protective force that they will be involuntarily attracted into the existing combat, and it is most inadvisable, from a moral point of view, that they should be forced to take a route which leads even slightly to the rear. Several of the columns may have to move long distances, so the manœuvre zone must contain enough roads for the purpose, leading in the right

direction. In short, we must have a protective force which is sufficiently strong to fix, to reconnoitre, and to hold a material portion of the hostile army, till the main body can take proper action, that is, can lay aside its necessary unreadiness; and all this must take place at such a distance that a free zone of manœuvre is ensured to the main body. The larger the numbers engaged on either side, the greater the force required to effect these objects, and the more extensive must be the zone of manœuvre.

The question arises of whether it is possible for the independent cavalry to perform this task. It is generally laid down that the principal mission of the independent cavalry is strategical reconnaissance, that is, reconnaissance before the rival armies are within striking distance, in itself a vague term, but which may be taken as meaning two or more days' march apart. To enable this to be performed efficiently, the corresponding hostile body has to be driven from the field. An important point in the use of independent cavalry is said to be that it must, in its action, be independent of the position of the main body, the disposition of the enemy's forces alone influencing it. Just before the rival armies come into collision, it has to clear the front, and move to a flank from which it continues its reconnoitring, now directed against the hostile flank and rear, and may be used to harass the enemy as opportunity occurs, either by raids, apart

No

from the battle, or by direct intervention in the battle. There is, usually, no pretention that it is capable of engaging large hostile mixed bodies of infantry and artillery, unless these are in a demoralised condition. The danger of its being drawn into their zone of action is clearly recognised by even the most pronounced admirers, such as General Von Bernhardt. Cavalry is a very expensive arm, its efficient training requires much time, and the replacement of its losses during a war is a matter of great difficulty. It is highly inexpedient to sacrifice it on tasks which can be performed better by other arms. Its withdrawal to a flank at the very moment when the fixing, reconnaissance and delay of the enemy's main dispositions are essential, is a full confession of its weakness for such action. Its preliminary action is not a true introduction to the battle, it is really an independent phase in the campaign. The reconnaissance, which it then carries out, is not what is most important for the battle plan. Being resisted by the hostile protective screen, its ability to penetrate deeply into the hostile dispositions, by the use of force, is necessarily limited. It will soon encounter mixed bodies of infantry and artillery. The difficulty of getting past these in an ordinary class of country, or of escaping from their network, if they have been successfully avoided in the advance, is often overlooked. It will probably be able to establish the contour or fringe of the

hostile dispositions, in itself, of course, a matter of very considerable importance. Small, well led, patrols may succeed in penetrating the screen, and seeing something of the main dispositions, but these are still capable of being changed, and there will be delay and difficulty in getting back the information. When the independent cavalry has cleared the front, the information it can gain will usually refer to portions of the hostile army which are not fixed, but will form a valuable addition to that procured by the fixing force.

If used by itself to gain delay by a fighting retirement, its effect will not be great, and its task a difficult one. In such cases delay results from the use of a powerful artillery, and from the uncertainty of the enemy as to when the retiring force means to stand to fight. Directly the opponent appreciates the fact that he is only opposed by cavalry and horse artillery, his caution will disappear in a great measure. His own independent cavalry, even though previously beaten, will have a free field, for the retiring cavalry will be fully occupied in its delaying action, so can be easily outflanked. For similar reasons, if it stands to fight, the delay it can gain, and its fixing power are small in comparison with the amount required by its main body.

The more we examine the present doctrine of the use of independent cavalry, the more evident it becomes that cavalry alone, thus employed, can-

not do what is wanted in the matter under consideration.

There is a school of thought in France which insists on the support of the independent cavalry by several mixed detachments. These are as mobile as possible, they move independently of the main body, and they are directly under the leader of the whole army. The general idea is that they should be small, possibly a British infantry brigade, with one or two batteries, and one or two squadrons. They may be as far as two days' march in front of the main body columns, and two or three might be employed on a front of thirty miles. This is a pronounced expression of the desire, which crops up here and there in nearly all regulations, even in those of Germany, to stiffen the action of the independent cavalry in some form by the other arms, and which seems to show that even the most orthodox advocates of the present doctrine of the use of cavalry are not altogether satisfied with its ability, by itself, to fulfil the mission they allot to it. Such mixed detachments do not appear to modify, in any essential, the generally approved method of the employment of the independent cavalry, which, when the rival armies approach each other, still clears the front, leaving the mixed detachments to be absorbed in the advanced guards, for they certainly have not got the necessary mobility to clear the front too. Their independence of the

rest of the protective system introduces additional complications, as regards command, in the delicate operation of gaining contact. Their weakness and isolation expose them to excessive risk of being overwhelmed before assistance can reach them, and the argument in their favour, that, if this occurs, the loss will not be a serious one to the army as a whole, cannot be accepted as valid. It would appear that, instead of being a support to the independent cavalry, they will constantly require its support, and thus hamper its movements. Their cordon disposition presents the same weakness, which belongs to the use of a series of tactical advanced guards, as will be seen later. They necessitate the breaking up of units. They constitute a sort of compromise between having a general advanced guard and not having one. Their admirers maintain that their very weakness and mobility will enable them to carry out the elastic movements, necessary in a protective body, which a general advanced guard is too ponderous to perform. They can escape from unfavourable positions, in which a larger body would be inevitably fixed. It is, however, difficult to understand how they will be able to pass from offensive to defensive action, as readily as a body the greater strength of which allows of a greater depth in its dispositions. On careful consideration they do not appear strong enough to "fix," to reconnoitre by force, or to delay seriously

a material portion of a hostile force of all arms. It is perhaps worthy of note that the *généralissime* of the French army, in his criticism on the great manœuvres of 1910, strongly deprecates the use of a large number of *détachements mixtes*.

This expression of *détachements mixtes* is used by some French writers with reference to much larger bodies, such as corps or divisions, thrown out from the main body in any dangerous direction. The generally accepted terminology for protective bodies, such as advanced, flank and rear guards, is doubtless far too rigid, and often confusing. For example, what constitutes an advanced guard one moment may become a flank guard the next, and *vice versa*, or the alteration in conditions may require a new protective body in a fresh direction, which will disturb the nomenclature of the guards already in use. A study of the movements of the French army before the battle of Friedland will show clearly the difficulty in question. Any attempt to avoid this confusion is to be commended, though the expression "protective guard," often used in this work, appears to be better than "mixed detachment." Taken in this sense, a "mixed detachment" includes a general advanced guard.

In some regulations, for example, the British and the French, the protective cavalry of an army is a separate organisation apart from the tactical advanced guards, being under a single commander,

who receives his orders direct from the leader of an army. In others, such as the German, the protective cavalry as a separate organisation does not normally exist. The different columns are protected by the cavalry belonging to the divisions composing them, and this cavalry does the work of our protective and divisional cavalry combined. The portion carrying out the duties of our protective cavalry is sometimes under the commanders of the tactical advanced guards, and sometimes directly under the commanders of columns.

When this Cavalry forms a separate organisation, as in the English system, it can be concentrated to strengthen any particular tactical advanced guard, which requires assistance, and which thus gains a certain amount of importance, but by itself, or even when joined to the independent cavalry, it cannot be regarded as being able to meet the requirements under discussion, any more than the independent cavalry can. In the German system this cavalry is really a portion of the tactical advanced guards, the working of which remains to be considered.

An army must advance by several, more or less parallel, roads, the general direction of which leads towards the objective. The average distance apart of roads suitable for the march of large bodies is said to be seven to ten miles in central Europe. Units, such as army corps or divisions, are allotted to these roads, as the circumstances of the particu-

lar case require, and the heads of columns are roughly in one line. In what we may conveniently call the German system, each column, marching by a separate road, is preceded by its own advanced guard, a convenient fraction of the whole, such as a brigade for an army corps, and its distance from the head of the column is supposed to be sufficient to give the column time and space to lay aside its own unreadiness. The commander of each advanced guard is under the column commander, the whole forming a single command. There is no separate commander for the whole series of advanced guards. The density of the whole protective line may be roughly one man to every two or three yards of front, and this thin screen lies at a very short distance, perhaps five miles, a little more or less, from the heads of the columns.

In what follows it is presumed that the enemy is in a higher state of readiness than our army, that is, that he can develop his dispositions more quickly than we can. In the case where he attacks all our advanced guards, more or less simultaneously, we may desire to manœuvre the whole of the main body, so as to attack him from the line C.D. (Plan 6). No 1 Column will take a day, or a day and a half, before it is ready to attack, the other columns will take slightly less. During the manœuvre considerable portions, at least, of all the columns will be executing a flank march, within five or six miles of the line on which the advanced guards

are endeavouring to delay the enemy, and will be in a most vulnerable condition. The zone between the advanced guards and the heads of columns is so narrow, that it is improbable that it will contain the necessary roads for the manœuvre, and the movements of columns, at any rate of their leading units, will have to be retrograde, which gives rise to a bad moral impression. During the manœuvre the fight must be carried on by the advanced guards, a series of weak, isolated groups, all coming from different units, and without any commander over them as a whole. One flank, it is true, may be assisted by the independent cavalry, and the protective cavalry may strengthen some other point, but, if they associate themselves too closely with the defence of the advanced guards against the enemy's artillery and infantry, the hostile cavalry is at once given a free field for action. It is quite evident that the advanced guards cannot gain time by a fighting retirement, for the space available for them is so small that they will almost at once be mixed up with the main body in its attempt to manœuvre on to the line C.D. If the manœuvre of the main body is a distinctly retrograde one, for example, on to the line C.D., which is possible, though generally complicated and inadvisable, the fighting retirement may be able to gain the necessary time, but the operation will be excessively risky and difficult, on account of the closeness, to begin with, of the heads of col-

umns, and of the want of proper control over the advanced guards.

If the advanced guards endeavour to fight where they stand, it is apparent that they are much too weak to cover the whole front. They must work in independent groups, and their flanks will be vulnerable. They may be able to hold out for a short time, say three or four hours, but they will, by that time, have been obliged to send every man into the firing line, and, when the crisis arrives, they will be driven from their position in disorder, right on to the main body, which will still be engaged in executing its manœuvre.

No doubt the enemy will be forced to develop considerable strength against them, and they will thus make him disclose his dispositions to some extent, but the time they can hold out by themselves will hardly be sufficient to supply data for a plan of battle, much less for the execution of the necessary manœuvre. The enemy's dispositions are not seriously disorganised as regards the arrangement of his main columns, for the influence of a thin protective line cannot extend very deeply, its effect must be somewhat superficial. Should the enemy hold back his main body to begin with it will be almost impossible to drive in his protective troops. Even if the manœuvre of the main body could be carried out, for example, on a line C.D., each column would be deprived throughout the battle of one of its important units.

It seems, therefore, essential that the advanced guards should be strongly reinforced, and the manœuvre of the main body executed with what remains. If the columns each consist of an army corps, the remaining brigade of each leading division may reinforce the advanced guard brigade, and the second divisions of army corps execute the manœuvre. The zone for manœuvre will be deeper by the length of a brigade in column of route, and the manœuvre will possibly be more quickly executed, but the corps organisation is destroyed, and the leader must issue orders to far more units. Half the entire force will probably be on the defensive, and the ensuing battle must be regarded more as a defensive than as an offensive one. If the columns and their advanced guards consist of two divisions organised on British lines, the advanced guard brigades can be reinforced by the rest of the leading divisions, and the second divisions of columns execute the manœuvre. The organisation is preserved but, as before, the battle is really a defensive one. With columns each of one British division, the organisation must be destroyed.

If an attempt is made to gain more time and space, by unduly increasing the distance between the heads of the columns and the advanced guards, the isolation of the latter will tend to decrease, still further, their powers of resistance. They cannot hold out in a standing fight during the

manœuvre of the main body, and probably not even till direct assistance reaches them, in the form of reinforcements, from the heads of columns. Such a long, thin, broken-up line of protection, without a commander for the whole, will find it extremely difficult to gain delay by a fighting retirement, even when assisted by the cavalry. Their power of mutual co-operation is very small. Each is a part of its own column, and any attempt to convert them into a single organisation, which works for the army as a whole, is likely to fail altogether.

If the enemy's attack is only developed, at first, against a portion of the advanced guard line, it is very difficult for the advanced guards which are not engaged to assist those that are. The distances to be traversed are considerable, and suitable cross roads may not be available. If they do march to the sound of the guns, they thereby expose their own columns to the possibility of being surprised; their replacement must be arranged, which takes time. The junction of several advanced guards in a single combat will result in an unorganised force of independent units, without any proper control, and it can never be so effective as the action of a single body of their combined strength, under its own commander.

The resistance of the advanced guards, which are engaged against such a concentrated attack, will, as before, be insufficient to allow of the man-

œuvre of the main body as a whole. The columns to which they belong will have to reinforce them bodily, and may hence be regarded as unavailable for manœuvre. The remaining columns have still a liberty of manœuvre, but this is cramped. For example, if the hostile attack is on Nos. 3 and 4 advanced guards, Nos. 1 and 2 columns must manœuvre on the right. This can be foreseen by the enemy, and provision made against it.

If the enemy's attack is oblique, and is not delayed by any special side protection, the flank column concerned, say No. 4, must be used as a protective force to provide the time and space for the remainder of the army to manœuvre, though it is likely that No. 3 column may be dragged in to the protective combat. Its own advanced guard will afford No. 4 column little assistance in assuming such a rôle, and its formation in column of route does not readily admit of such action.

The line of advanced guards, as a whole, has little or no power of manœuvre. It takes it just as long as the main body to effect any change of direction. Its power of action decreases with the angle at which the enemy advances, that is, as a rule, when the danger is greatest.

If the leader desires to take up a defensive position with the main body, the line of advanced guards, in endeavouring to gain sufficient time for this, will become fixed into an advanced line of defence, which is likely to be finally driven back,

in the utmost confusion on the main position, with disastrous results.

If the leader of the whole army considers the conditions so unfavourable that a retirement of the main body is necessary, the advanced guards do not readily lend themselves to a conversion into a rear guard. They are all independent units, much dispersed, and without a commander of the whole.

Similarly, if the main body is called on to move to a flank, the advanced guards will form a most indifferent flank guard. Each column loses a unit, and the organisation of the whole army is disturbed.

The advanced guards have no sort of power to entice the enemy in any given direction, so that the main body may fall on him under favourable conditions.

Each advanced guard is, as it were, welded to its own column ; it can gain for that column time and space to come into action properly within an area, which is sufficient for its own purpose, but which is small in comparison with the area within which the columns may be required to manœuvre as a part of the army as a whole. The sum of the efforts of all the advanced guards only allows a local freedom of action to the individual columns, not a freedom of action to the whole mass of the army. The thinness of the line of advanced guards militates against the use of offensive action, to

compel attention, as it is difficult with a body, not possessing considerable depth, to pass from offensive to defensive action, which is nearly invariably the ultimate rôle of a protective body. There is a want of power to penetrate through the hostile screen and to force the enemy to show his main dispositions, or a material portion of them. The weakness of the protection, as a reconnoitring and delaying body, and its proximity to the main body, will force the leader, either into making a premature plan of battle, which may result in a blow being delivered too soon or in a wrong direction, or in his being forced to use up an undue portion of his main body as reinforcements to the advanced guards, so as to enable them really to fulfil the work of protection, thus unduly submitting to the will power of his adversary, or, in other words, failing to regain or maintain his initiative.

When such a series of advanced guards is alone employed, the final disposition of the whole army, for its great battle, is really dependent solely on information gained by the cavalry, secret service, or other means, at some time previous to contact, and which may have changed when contact actually takes place. We have seen, too, how meagre and vague such information, as a rule, will be.

When we act offensively on a preconceived plan, which is founded on such good information that little or no change is necessary in it, when we are able to paralyse the enemy into an acceptance of

our will power, and when we can ensure our own superior readiness to fight at the place and time of battle, then, no doubt, tactical advanced guards will be sufficient. Protection is the safeguard of unreadiness in its full sense. If we are absolutely ready we require no protection.

A series of tactical advanced guards is a mere screen—a pure cordon system of protection, with all its disadvantages and weaknesses. In fact, it appears to be wanting as regards all the points in which a protective system should be strong, namely, a power to fix, to reconnoitre and to hold a material portion of the hostile army at a sufficient distance till the main body can lay aside its “necessary unreadiness ;” and yet it is the system at present nearly universally adopted, in preference to that of the general advanced guard, which is apparently considered to possess even more serious disadvantages. After an examination of the doctrine of the general advanced guard it will be possible to form a judgment as to whether these disadvantages are as real as they are represented to be.

The general advanced guard consists of one (sometimes more) of the great, self-contained, units of which a force is composed—an army for a group of armies ; an army corps for an army organised in army corps ; a division for an army consisting of divisions.

Napoleon, it is true, did not divide his forces

into several armies, but varied the size of his corps, namely the number of divisions in each, in accordance with the tasks assigned to them, and the capacity of his marshals. Thus, in the events leading up to the campaign of 1812, we find that the corps of Marshal Davoust consisted of 100,000. It was called by Napoleon an advanced guard and, in co-operation with other protective bodies, was used as such to cover the assembly and advance of the whole army.*

In Napoleon's conception there seems to have been no arbitrary limit to the size of a protective guard, but the greater the strength of the forces employed in a campaign, and the greater their unreadiness, the stronger were the means employed to protect them.

In modern times a country's forces are generally divided up into a number of similar units, such as army corps or divisions, and owing to the great number of these, it has become necessary, for purposes of command, to form several groups or armies from them, the number in each varying with the task assigned to it. Thus the formation of a general advanced guard to cover a force, however large, does not present any special difficulty as regards organisation of command and staff. For example, the Germans could have conveniently used the small 1st Army, as a general advanced guard, to cover the advance of the large 2nd Army,

* Bonnal, "La Manœuvre de Vilna."

from the Rhine to the Saar, in 1870, an operation which, as carried out, was particularly hazardous, had the French possessed a really competent commander.*

The task of a general advanced guard is of such a delicate nature that a mere collection of troops, suddenly thrown together, with an extemporised staff, and a "spare" general, who knows nothing about them, cannot be expected to perform it well. Men of the type of Davoust, Alvensleben or Skoboleff, the best generals a country has, are necessary for the command, and it is the unit they generally command which should be chosen for the purpose.

Napoleon did not exhaust his cavalry by sending it forward, on a strenuous mission of reconnaissance, practically "en masse." He limited the amount to what he considered necessary for this purpose, and kept back the remainder, so that it might be fresh on the battlefield, and fit to carry out the pursuit. Though he had often a powerful cavalry and many excellent leaders for it, he objected to an independent campaign of cavalry masses in advance of the army, the result of which he could not personally control, but which he recognised must deeply influence the success of his whole plan. He preferred a true co-operation of all arms, and even the cavalry he did send forward was in close touch with his advanced

* Bonnal, "La Manœuvre de St. Privat."

guard, so that it could be quickly supported. The campaign of 1806 is an admirable example of his method and its results.

The whole modern theory of the use of cavalry, as a separate force, in advance of an army, cannot be regarded as having any true foundation on actual war experience. There are doubtless cases, especially when a leader has a great preponderance in this arm, when it is justifiable, but there are others when it must nearly certainly lead to an initial disaster, which will influence profoundly the whole of the subsequent course of the campaign, however strong the other arms may be.

If the great mass of the cavalry is used in advance, the question arises of whether it should be placed under the commander of the general advanced guard or not.

The great objective of an army, which seeks for a decision, is the enemy's principal army. A geographical objective, or rather direction, is only admissible as a guiding idea in the combination of operations, and as long as it does not interfere with the great objective. The duty of the "independent cavalry" is to seek out and reconnoitre the enemy's principal army, or group of armies, so that its own forces may engage it. This presumes that there is a considerable distance between the rival forces. When they are in almost immediate contact, for example, as probably in the opening phase of a war between

France and Germany, the independent cavalry, or a large portion of it, might be given another mission, affording more room for its action ; but this is not its normal rôle.

The independent cavalry seeks for what is unknown, or only partially known from other sources. Hence it is imperative to allow its commander great freedom of action. It is launched in the decisive direction, namely that which promises the best fulfilment of the reconnaissance needs of the Great Head Quarters. This direction is that in which the enemy's principal force is believed to be. But this is also the direction in which the whole force desires to march, so as to engage the enemy, namely towards its great objective. The main body of the independent cavalry moves concentrated, not in a narrow sense, but so that it can readily combine to fight. It is guided by means of a widely extended reconnoitring line, moving in advance of it, and searching for the enemy. Being a very mobile body, its original direction can readily be altered so as to allow for the movement of the hostile forces, which it is seeking, or for an initial error. Though it is charged with the task of engaging the similar hostile body, and, if possible, driving it from the field, it is so important that it should be able to reconnoitre the enemy's principal force as early as possible, that it must not allow itself to be diverted from this, its chief object, by a distant search

for, and pursuit of, the rival independent cavalry. To do so would be to submit to the opponent's will. Hence, as long as it can keep the field, it should endeavour to move without serious variations directly on to the enemy's principal force.

It is not necessary for its commander to be constantly looking back to see what his own army is doing, he looks forward towards the enemy's army, and guides his cavalry towards it, so that he can best carry out his task. Thus he is not "tied" to his own army for direction or distance, and is "independent" of it in this sense.

Now the great columns, forming the ponderous and unwieldy mass of the main army, have not the same advantage of being able rapidly to change their direction as a whole, but their objective is the same as that of the independent cavalry. They cannot follow its every change of direction, but they endeavour to conform to its general line. The general advanced guard is an intermediate connecting piece between the independent cavalry and the main body, which assists in converting the possibly irregular course of the independent cavalry into one which the main body is able to follow, so that it can strike its objective, the enemy's principal force, by the shortest and least erratic route. Thus, though the independent cavalry is not controlled during this phase by the position of its own army, that army is "tied" to the independent cavalry, through the general

advanced guard, but the connection is an elastic one.

The common idea that the independent cavalry immediately gains a great distance in advance of the main army is usually incorrect. The strategical reconnoitring patrols must advance more quickly than the reconnoitring squadrons, and these than the main body of the independent cavalry. Von Bernhardt maintains* that, if the reconnoitring patrols can march thirty-five to forty miles a day, and the squadrons twenty-five, it is all that can, as a rule, be expected. Hence, it would seem probable that the main body of the independent cavalry will normally advance some twenty miles a day. Unless the space between the rival armies is very great, which will not usually be the case, the main body of the independent cavalry is not likely to be very far removed from the general advanced guard, which, as has been explained, "follows" it. More rapid cavalry advances are of course possible, for example with the object of seizing certain points of importance, but it must be remembered that a premature exhaustion of the cavalry must be justified by really great urgency.

As both leaders will probably seek to reconnoitre by means of their independent cavalries, it is highly probable that these bodies will meet,

* Von Bernhardt, "Cavalry in War and Peace." English translation, p. 37.

and a struggle for supremacy take place between them. Unless there is some considerable difference between them, the chances of one side winning or losing are equal. If one side is victorious, it will be able to continue its advance and endeavour to carry out its mission of reconnaissance by using force in addition to stealth in penetrating the hostile screen. If it is defeated, the enemy will have this advantage, and the beaten cavalry must, at any rate temporarily, seek for some haven of refuge in which it can reorganise. Its reconnaissance is then limited to what can be done by stealth by small bodies. The general advanced guard is the convenient haven of refuge for the mass of the independent cavalry, nor will the cavalry, which has been thus proved inferior, have much chance again of using force for reconnaissance, apart from the general advanced guard and its detachments. Its best chance of success in reconnaissance, and in another combat with the enemy's independent cavalry, seems to lie in its continuing to work in co-operation with the general advanced guard. This powerful body will have an undoubted tendency to induce the enemy to divide his cavalry mass for reconnaissance of itself, and the two portions of the main force, lying behind and to either side of it. If this does take place, the inferior cavalry will again obtain a good opportunity, for more independent offensive action.

An independent cavalry which is, from the

commencement, plainly inferior to its adversary can apparently be used in two ways ; first, to entice the enemy's independent cavalry away from its principal task ; or second, in co-operation with the general advanced guard. The first course will probably fail, as the hostile cavalry will not be easily deceived, and it is dangerous, because the enemy will not be enticed unless he has a good chance of success against the inferior cavalry. While thus employed, it will fail to perform its main duty of reconnaissance.

Even an independent cavalry, which is successful in defeating its rival, cannot work for long without reference to the general advanced guard. Its penetration into the enemy's dispositions will not be very great. If the enemy is stationary, it will soon be brought to a standstill, and will quickly be overtaken by the general advanced guard. If the enemy is also advancing, it will have to retire before the hostile main columns, and it is still more quickly thrown back on to its approaching general advanced guard. It is only in a pursuit where it will be able to maintain a considerable distance for long.

One of the chief duties of the general advanced guard is reconnaissance by force, and it seems apparent that the main body of the independent cavalry, whether previously successful or not, must eventually assist in this. The general advanced guard, by its use of force, lays bare the enemy's main columns, and absorbs his attention, thus

creating a most favourable opportunity for cavalry to reconnoitre. The general advanced guard, too, requires assistance from the independent cavalry, which can do much to delay the envelopment of its flanks, if it stands to fight. If it carries out a fighting retirement, as in the case of a rear guard, there must be a very close co-operation between the two bodies.

The majority of writers agree that during the great battle, the best position for the independent cavalry is on a flank, and in advance of it, if possible, and that it must gain this position, before it is involved in the network of its own main body columns. It seems out of the question, as a general rule, to leave the choice of which flank this should be to the commander of the independent cavalry. The decision is a portion of the plan for battle, which the leader of the whole force is called on to formulate, and it is the action of the general advanced guard, which supplies him, at least to a great extent, with the necessary data. Hence the cavalry's movement to a flank cannot generally precede the engagement of the general advanced guard, which is another reason for this close co-operation till the plan for battle is completed. It is only when this is done and the condition of the general advanced guard allows of it, that the independent cavalry can move to the position chosen for it by the leader, in harmony with the remainder of his plan.

We thus see that, in a great many cases, a very close co-operation is necessary between these two bodies. As long as the leader of the whole force is with the general advanced guard, this co-operation can be regulated, and there is no advantage in placing the independent cavalry under the commander of the general advanced guard. When the leader is not there, there must be a unity of command to ensure co-operation. If the independent cavalry is known to be inferior to the similar hostile body, or has been proved so by a reverse, it should be placed under the general advanced guard commander, till the main plan for battle is issued. A superior independent cavalry, or one that is believed to have a good chance of success, may be kept distinct from the general advanced guard till, as has been explained, the period of their mutual co-operation commences. During this, and until the independent cavalry is given, in the plan for battle, some other mission, for instance, on a flank, it should remain under the general advanced guard commander.

A complication arises when the cavalry commander is the senior. It seems impossible to place him in command of the combined forces, as he would be compelled to give up the personal command of the cavalry, and a new staff would have to be formed for the whole. The general advanced guard is undoubtedly the more important portion of the combination, and the cavalry works

for it more than it works for the cavalry. Continuity in the method of working the general advanced guard must override every other consideration, and it must be definitely recognised that its commander continues to direct, even should the independent cavalry commander be senior to him.

The objection may be raised to the independent cavalry's being placed under the commander of the general advanced guard that the transmission of information to the leader of the whole force will be delayed. The general advanced guard commander must evidently get any information, requiring early action, by the most direct line, and, even when the independent cavalry is not under him, it is essential to send him a duplicate of any important message, which is transmitted direct to the leader. When the independent cavalry is under the general advanced guard commander, it is equally essential for the commander of the former to send information direct to the leader, as well as to his immediate superior. The commander of the general advanced guard has certainly not got the staff or the possibility generally of dealing with voluminous information, but there can be little difficulty in arranging that this should go to the leader direct. Even the commander of a reconnoitring patrol can send information to the leader direct, when he considers the urgency sufficient. With a reasonable amount of care and forethought, there seems no real reason why in-

formation from the independent cavalry should be delayed in reaching the leader.

This is not the place to discuss the advantages and disadvantages of the method adopted by Napoleon of keeping back a very considerable portion of his cavalry, and only sending forward what he considered necessary for strategical reconnaissance. When such a system is adopted, the advanced portion is liable to meet a very superior hostile cavalry, so, on the principles already stated, must act in close co-operation with the general advanced guard, and be under the orders of the commander of that body, at least till the plan for battle is given out, unless the leader of the whole force is present to ensure this co-operation. In any case, such a system may be necessary owing to the unsuitability of the area of operations for the employment of large cavalry masses, or, in the case of overseas operations, on account of the impossibility of landing such masses in advance of the general advanced guard.

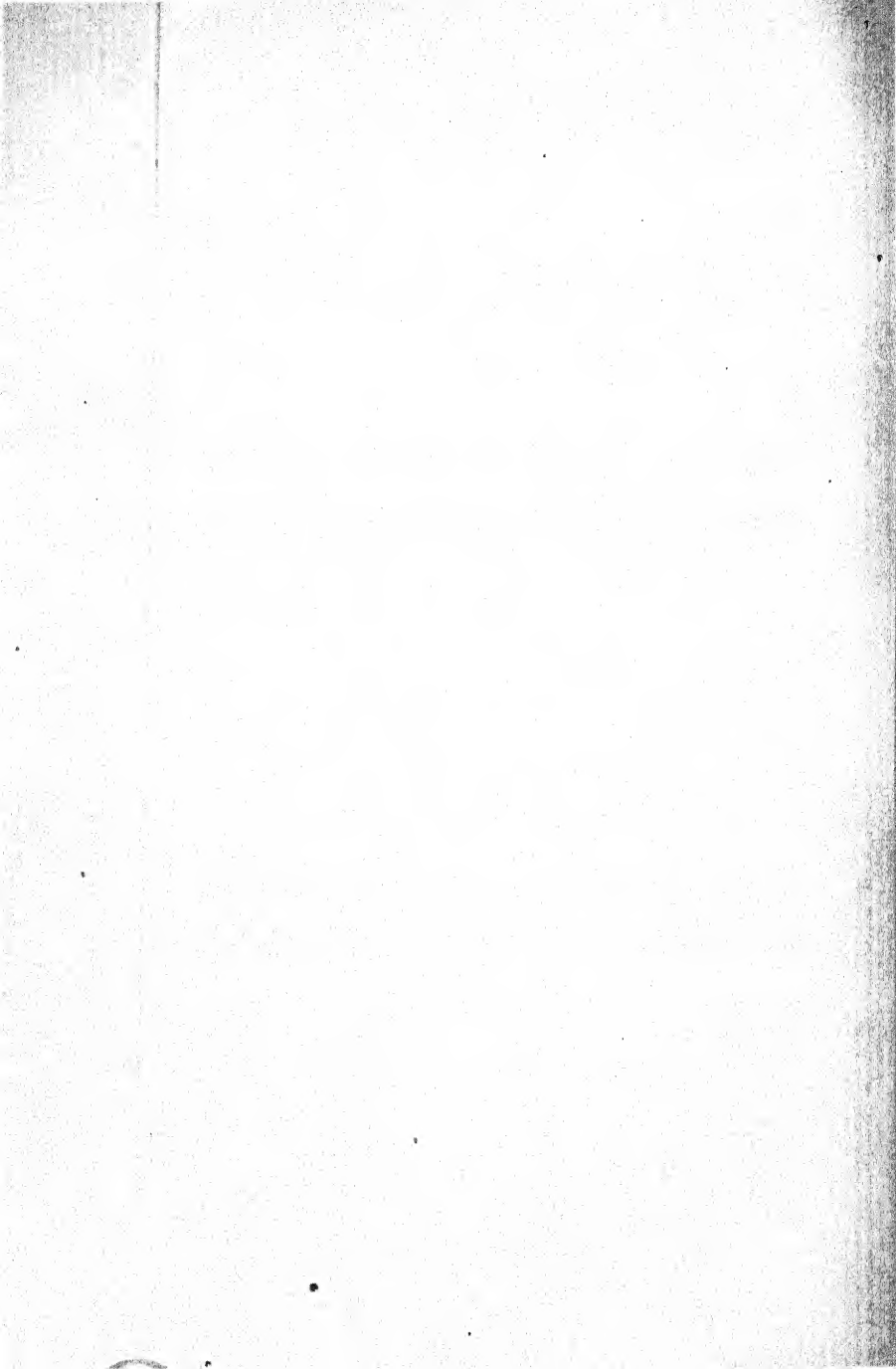
The British and French systems of placing the protective cavalry of an army under a single commander is not adapted to the case where a general advanced guard is used. The introduction of that body naturally divides the protective cavalry into three groups, viz:—That which protects the general advanced guard, and that which secures each of the fronts of the main columns lying in rear and to either side of it. The general advanced guard is

not welded to the main body, but may be required at any moment to change its relative position. If the protective cavalry, as a whole, works alone for the general advanced guard, a large portion of the main body is liable to be unscreened. The general advanced guard claims to protect the main body, even those portions not directly covered by it, in a great many cases, from serious attack, but it has no power to screen from hostile reconnaissance the portions of it not directly covered. The whole front of the army must be screened by the protective cavalry, but such a lengthy line is incapable of changing its direction quickly enough to suit the general advanced guard. That body is isolated, and its flanks are naturally much exposed. It requires a relatively strong force of cavalry to perform for it the duties of the protective cavalry, and this force must be under its commander, not under the leader of the whole army. The mounted troops, which, in the British system, remain an integral portion of a body, such as a general advanced guard, will be quite insufficient to carry out its protective duties, and a special allotment to it of cavalry will be necessary. The German system, which allows each big unit the use of a substantial cavalry force for its own protection, and does not introduce a separate force of cavalry under a separate commander, must apparently be employed when a general advanced guard is used.

The combat of the general advanced guard will probably last a day, possibly more, before support, direct or indirect, reaches it and it is likely to be of a very strenuous nature, requiring a sustained use of artillery and infantry fire. The number of guns, now permanently allotted to big units, such as army corps and divisions, is large* and no additional allotment is to be recommended for the general advanced guard, as it would disorganise other large units of the main body. But it is most necessary that the guns and rifles, which it has got already, should be plentifully supplied with ammunition, and consequently the full share of the ammunition columns of the whole army should march with it, and motor transport will greatly reduce the inconvenience of this. If its ammunition is kept in rear of the main body, it would be most difficult, if not impossible, to push it forward, with any certainty, through the network of the manœuvring columns of the main body, even when ammunition columns are supplied with motor transport.

The engineers, belonging to the unit composing the general advanced guard, will usually be sufficient, but special circumstances may render it necessary to attach additional pontoon or other technical units. It must be remembered that it is always a disadvantage to take away special troops and equipment from a self contained unit

* Except in India.



of the main body, which may urgently require them for itself later on.

The general advanced guard should have a sufficient supply of aeroplanes, not only for itself, but also for the cavalry which may be employed in advance of it.

The general advanced guard is not a body which can be relieved easily ; its rôle will probably last for a distinct phase of a campaign. Being in advance of the main body, the prospects of its being able to live on the country to a great extent are favourable, so that the supply columns which must accompany it need not be very large. When in movement, the difficulty of getting up transport to it from behind the main body must, even with motor transport, be very great. The personnel should not be exposed to unnecessary hardships, so the requisite baggage must accompany it. As has been pointed out, the independent cavalry will not often be very far distant from the general advanced guard, so that much of the transport of the former may conveniently remain frequently with the latter.

It is probable that the losses of the general advanced guard will be abnormally heavy, as it will have to engage very superior numbers, unsupported for a considerable length of time. If it is only one day's march in front of the main body, its ordinary allotment of medical units may suffice, but, if more, additional units will frequently be necessary.

Chapter XI.

THE GENERAL ADVANCED GUARD (CONTINUED).

VON Clausewitz maintains that the position of the general advanced guard should be in front of the centre of the army it covers, and it is probable that this will be true in a great many cases. There is, however, a rigidity about the conception which is misleading. It is partly due to the nomenclature so unfortunately adopted for protective bodies. The great protective guard, which is interposed between the supposed position of the enemy and the main army, which is advancing or awaiting in expectation of the hostile advance, though it is called an advanced guard, may, at any moment, have to change its rôle into that of a flank guard or rear guard. We have seen that, in an advance, the main body follows the independent cavalry, and that its unwieldiness requires that the possibly erratic course of the cavalry should, as it were, be smoothed down into a gentler curve, which it can conveniently follow, and that this is made possible by the general advanced guard, which endeavours to keep a straighter course than the

cavalry, but will probably be more erratic than the main body. It may thus have to change its position with reference to the front of the main body. Again, when the manœuvre for battle is being carried out, the main body will probably change its position with reference to that of the general advanced guard.

The position of the general advanced guard will really be where the danger is greatest, where reconnaissance of the enemy is most imperative, and where it is most necessary to establish a pivot on which the army it protects can manœuvre.

The distance of the general advanced guard from the main body must be judged in accordance with the principles laid down in Chapter ii.

Its duty is to maintain a free zone of manœuvre between itself and the force it covers, so that the latter may be directed in the manner chosen by its leader. Several roads, crossing the general axis of movement, may be necessary for this manœuvre, and the distance of the general advanced guard must allow of a sufficiency of these. It must be remembered, however, that the different columns of the main body, in this manœuvre, will certainly have to be content to march by inferior roads, which would not be considered good enough for an ordinary movement. It is evident that the zone of manœuvre must be as small as possible, compatible with freedom of movement, for, by increasing its depth, the duration of the manœuvre,

and the time the general advanced guard has to continue its isolated combat, are prolonged.

Its distance is limited by the time it can resist, even against great superiority. Its combat must not constitute a separate engagement, but a prelude to the battle. It must be able to hold out till support, direct or indirect, reaches it. If its distance is just sufficient to ensure the zone of manœuvre, for example, when the main body is well concentrated and in a high state of readiness, it must resist where it stands, and it only gains the time it can hold out. If its distance is greater, as it may have to be for a main body which is greatly dispersed or only in course of formation, it can carry out a fighting retirement up to this zone, and then stand to fight, thus gaining more time for the main body.

It has sometimes been stated that the distance of the general advanced guard should be approximately equal to the front of the main body. Such a rough-and-ready rule appears to be dangerous, for it may or may not correspond to the actual conditions. The inevitable unreadiness of the main body, on which this distance greatly depends, is not only due to its actual dispersion, but frequently to its incomplete organisation, especially at the opening of a campaign, and possibly to other causes unconnected with distance. For example, the distance of the general advanced guard of an army, which is ready to move directly it can re-

ceive orders, will be less than in the case of an army which cannot move for several days owing to want of completeness, although the fronts of the two armies may be equal. This will account for the great distances of Napoleon's protective bodies, when he stood on the strategical defensive. A case in point is the dispositions that he ordered Berthier to make at the opening of the 1809 campaign.* Here the distance of the general advanced guard approximated to the front of the army.

In the case of an army actually in movement or ready to move, we find that the distance of the general advanced guard was generally much less than the front of the main body, being more nearly equal to half the front. Examples may be found in the 1806 campaign.

The distance of the general advanced guard is a matter of judgment founded on a correct appreciation of its delaying power, with reference to the features of the country and of the necessary unreadiness of the main body, especially as regards the network of roads in the area of operations. It certainly is not a problem which can be solved by an arbitrary reference to a linear dimension.

A natural over-anxiety for the safety of the general advanced guard in its isolated position, will generally tend to limit unduly its distance, with a consequent loss of freedom of action for the main body. This tendency must be resisted. It can

* Bonnal—"La Manceuvre de Landshut."

only be stated that the general advanced guard may be anything from a short day's march to three or four days' march from the main body.

There are also certain considerations, which must be taken into account as regards the position of the general advanced guard, with reference to the hostile forces.

As regards the dispositions to be adopted in the strategical defensive, which political or military circumstances may imperiously force on a country, General Bonnal, drawing his conclusions from the 1809 campaign, has expressed the following opinions.*

As a general rule, at the moment which preceded the opening of hostilities with an enemy, whom we allow to assume the offensive, the main body should be assembled at a distance, from the covering mass, at least equal to that which separates this mass from the frontier.

On the same principle, the closer the advanced guard, or covering force, to the frontier, the more concentrated must be the dispositions of the main body, and the less will become the facilities for its manœuvre.

Thus, when the enemy is master of the offensive, the extent of the assembly dispositions as regards front and depth is dictated by the distance of the covering mass from the frontier.

* Bonnal—"La Manceuvre de Landshut."

On the other hand, when the front of the assembly formation is necessarily a fixed quantity, it must be at a distance from the frontier double that of the interposed covering mass.

Napoleon was able in 1809 to adopt such a formation, as he was not operating in his own country, and he did not care much for the opinions or the calumnies, due to surrender of territory, of his allies, the Bavarians.

To abandon without a battle fifty or sixty miles of one's own country requires an extraordinary force of character, though this, and more, was done by the Russians in 1812.

Yet, we may be forced into adopting a defensive attitude, and we should then have the courage of our opinions and abandon territory. The most dangerous solution of the problem will be a half and half course, which does not allow time to the leader to watch the approach of the enemy, and thereby fathom his plan of action.

The increased duration of the combat of the covering force in modern times, owing to improvement in weapons, will, however, allow of less extensive surrender of territory than in 1809.

The surrender, even temporary, of any territory constitutes a material loss as regards resources, and must have a most demoralising effect, and from this can be seen the enormous advantage of the maximum of rapidity in the mobilisation and the assembly of forces, so as to be ready before

the enemy, and to impose our will on him by the use of the offensive, before he can adopt it.

The general advanced guard must move so that it can come into action as a single body, in any direction, in the shortest time. Hence it may be advisable for it to march by several roads, provided they are close enough together, but this must not be carried to an excess, as depth of formation, which is essential to its particular form of offensive action, is then sacrificed. The general advanced guard must be prepared to give up a certain amount of its convenience for the sake of extra readiness, so that a portion or portions of it may have to march by inferior roads, which would not be lightly used by the main body columns. When we recollect that the length of an army corps, with its ammunition columns and even a reduced quantity of supplies, will not be less than twenty-five miles, it will at once be seen how necessary it is to gain compactness by the use of several roads. An army corps, moving on two roads, and a full day's march ahead of the main body, will barely be clear of the latter. A point of importance is that the assignment of the general advanced guard to one or more roads should depend on its own requirements for rapid action, and not be dictated by the protective needs of individual columns of the main body, for which provision is made by other means.

The general advanced guard must secure its

own liberty of action and safety by protective guards. Each of its columns will have its own advanced guard or vanguard, that of the most important one being stronger than the rest. Owing to the exposed position of the general advanced guard, protective guards on the two flanks are generally necessary and, when the network of roads allows of co-operation with the main body of the general advanced guard, should be employed. As an instance—with a general advanced guard of one army corps, the principal vanguard and the flank guard on the more exposed side, might each be a regiment (three battalions) with a group of artillery; the other vanguards and flank guard a battalion each; of course, such strengths will vary according to circumstances, units being employed wherever possible.

The whole series of protective guards is covered by the protective and divisional cavalry, attached or belonging to the general advanced guard, and the distances of the protective bodies are arranged on the principles given in Chapters viii and ix.

These protective guards form most valuable supports for the independent cavalry and appear to be capable of fulfilling the same functions as the *détachements mixtes* so strongly recommended by a certain school, without suffering from the disadvantages of those bodies, namely their isolation and cordon disposition.

The dispositions of a general advanced guard

are, generally speaking, those of a force acting by itself, but as it " follows " the independent cavalry of a whole army, it obtains a very real protection and assistance from that great body, which would not otherwise be the case. That this protection should be in addition to its own protective measures is natural, as it is the rôle of a general advanced guard to be exposed to attack by very superior forces.

If the Napoleonic theory of holding back a large portion of the cavalry is adopted, the disposition of that part of the cavalry, which is attached or belongs to the general advanced guard, must be varied. The matter will be more suitably considered in detail elsewhere, and it seems sufficient to state here, that it may work, in advance of the general advanced guard, either as a single body, or as two bodies, namely one for exploration or strategical reconnaissance, and one for protection of the general advanced guard.

In 1805, 1806, 1809, 1812, and 1813, the divisions or corps of cavalry of the reserve were always massed between the protective body and the main body of the army, so as to be ready to manœuvre in co-operation with the protective body, or general advanced guard, whether the enemy took the initiative in the operations or was obliged to accept it.

Such a position appears to be still the best for that portion of the cavalry which is not originally used in advance.

Every column which is not directly covered by the general advanced guard, must have its own advanced guard, sometimes called its tactical advanced guard. This will be organised and placed in the same manner as that of a column acting by itself. The columns which are originally covered by the general advanced guard may at any time become uncovered, so must be prepared to push forward advanced guards of their own. With this in view, the arrangement of the column of route should be such as to permit of this being done with the least possible loss of time. Consequently it would appear advisable for them to have their own advanced guards ready at their heads to hasten forward when wanted.

The manœuvre of the main body may convert any of these tactical advanced guards into flank guards and, where necessary, new tactical advanced guards must be pushed forward.

The Italian regulations contemplate the possibility of being able to reduce slightly the strength of these advanced guards, when a general advanced guard is used. Such small variations seem undesirable as being unnecessarily complicated. Detachments are detailed by units, such as regiments or brigades, and slight reductions will generally break up their proper organisation.

The general advanced guard will be in front of the tactical advanced guards, thus forming a sort of bastion which flanks their general line.

The protective cavalry will work in advance of the tactical advanced guards in the manner already described. It is difficult to see how there can be a single body of protective cavalry, for the whole main body, under a single commander, as the general advanced guard will usually divide it into two portions, varying in size. The German method of organisation, where each column details its own protective cavalry appears to be the only solution.

The protective cavalry of the main body must endeavour to connect up with that of the general advanced guard. Consequently, as soon as a column, which has been directly covered by the general advanced guard, becomes uncovered, it must push forward its protective cavalry. The work of the protective cavalry of central columns is evidently much lighter than that of flank columns, so, when the protective cavalry is weak and is a separate organisation, the allotment to the former may be less than to the latter.

The local protection work of the divisional cavalry or other mounted troops, mentioned in Chapter viii, is evidently very slight in the case of central columns, for, until the manoeuvre for battle commences, it is unnecessary to protect their flanks. Even with flank columns it is only half of what it is in the case of a force moving by one road with both flanks exposed.

The principles stated in Chapter viii, for the action of the advanced guard of a single column, are

equally applicable to that of a general advanced guard, though space and time are much greater. A large isolated unit, such as an army corps, can be used, however, far more boldly than the advanced guard of a single column, which is necessarily much smaller. The duration of its separate combat is much longer, though the odds against it are the same. It possesses a greater power of passing from offensive to defensive action. The factor of time being much greater, the arrival of darkness will more frequently assist its delaying action.

The object of the general advanced guard is to "fix" a large portion of the hostile army, that is, to attract to itself an undue amount of attention, thus disturbing the enemy's dispositions as a whole, and, to a certain degree, paralysing his will power. It can interfere with or destroy a preconceived plan of action against the army it is protecting. Unless the hostile leader is of very superior calibre, his attention will be diverted from the principal to a secondary objective, and an undesirable situation may be created for him. Troops once committed to action get out of hand to a considerable degree and even when successful, their reorganisation takes much time.

The long range and accuracy of modern firearms, the use of smokeless powder, and the possibility of artillery employing covered positions have rendered reconnaissance of all descriptions more

difficult than it was formerly. An army which finds even a portion of its front blocked by a hostile general advanced guard will have great trouble in discovering what its strength really is. The results of ordinary reconnaissance will generally only refer to what is nearest, the possible dispositions behind remaining unknown.

A frontal attack must have a marked superiority in strength to give it a fair chance of success. Usually endeavours will be made to use flank attacks as well. These lead to a convergence of columns lying beyond the front of the general advanced guard, which means loss of time and disturbance of dispositions.

There is a natural inclination to exaggerate a hostile force which is interfering with a leader's plans, and this is likely to lead to the application of greater numbers than are really necessary to drive it away. A bold use of the offensive, by a numerically inferior force, will often have this result to a marked degree, as a leader cannot easily conceive the adoption of such a course of action, unless it is dictated by strength. The use of a strong defensive position, such as a river, renders preliminary reconnaissance slow and uncertain, and the attack will be long and tedious.

Measures can also be taken by a general advanced guard to increase this exaggeration, by the adoption of a large frontage or by other methods.

The general advanced guard is a "bait" the object of which is to create an artificial situation in its own neighbourhood, so that the enemy may be engaged in the task of overcoming its resistance, while the rest of the army executes a manoeuvre in the zone between them, and then delivers a blow against the enemy, whose attention is otherwise occupied, thus taking him at a disadvantage. An exposed body, such as the general advanced guard, has undoubtedly a sort of magnetic effect. The duty of marching to the sound of the guns is laid down or implied in most regulations, besides being a natural instinct in all good soldiers. If the enemy declines to pay the necessary attention to the general advanced guard, he must be compelled to do so by its use of the offensive. This offensive action must often be vigorous, but it must be economical. It must not go too far, and the power to revert to the defensive must be retained. Once it has effected its object of attraction, its main rôle is undoubtedly one of defence, and it thus gains delay. It is very difficult for any one who cannot appreciate the arguments of Von Clausewitz, as regards the defensive being in itself the stronger form of action, if the negative object of the postponement of the issue is sought, to understand fully the power of the defensive of a general advanced guard. It is the defensive which is maintained with the full knowledge that the great counter-stroke, "the flashing sword of ven-

geance," is surely coming to its assistance, in the form of the attack by its main body.

But besides gaining time and space, the general advanced guard is by far the most potent reconnoitring agent. The ability of even a very powerful cavalry to penetrate the enemy's screen, so as to look behind the veil, is limited. It may establish the contour of an enemy's dispositions, the fringe of his formations, but the general advanced guard lays them bare. It is a great reconnaissance in force of what is fixed, not of what can be changed at will.

The general advanced guard is a bastion thrown forward, which flanks the whole line of the local or tactical advanced guards of columns, not directly covered by it, whether these are in movement or at rest, disposed in the form of outposts.

Its distance in advance renders hostile reconnaissance of the main body particularly difficult. The enemy's patrols, which succeed in avoiding the independent cavalry and the screen round the general advanced guard, have far to go to gather their information and communicate it to Head Quarters. The delay will render such information much less valuable than if gained at a less distance, and interception of patrols is more probable.

If a strong reconnoitring body is used to penetrate up to the principal masses, it is liable to be attacked in flank or cut off by the general advanced

guard, or by some other portion of the protective system.

If the enemy's main columns, avoiding contact with the general advanced guard, advance to attack the main body, they at once enter an area which to them will usually be "full of the unknown," and at the same time expose themselves to be attacked in flank or rear by the general advanced guard, unless it is prevented from doing so by detaching a suitable force. The strength of this is difficult to settle in the absence of definite information as regards that of the general advanced guard. The great danger which would result from making it too small is only too apparent, so it will probably be made unnecessarily large, seriously decreasing the strength of the main striking force. Here again the protective guard will have fixed an undue amount of the hostile attention.

This body can be used to entice the enemy, by a fighting retirement, in a given direction so that the main body may fall on him at an advantage in some favourable area.

If the leader considers it expedient to retire his main body, the general advanced guard at once becomes the rear guard; if he settles to defend a position, it must carry out a fighting retirement right back to that position, for to become "fixed" before reaching it would be disastrous.

This fixing or paralysing of the enemy's will power, this attraction of excessive attention, this

gaining of information by force, and this formation of an area of the "unknown"—the result of the "force" of the general advanced guard, assisted by the rest of the protective system—give the necessary knowledge, "time" and "space" for the leader of the army to abandon his necessary unreadiness, to regain what is usually called his initiative, and to execute a manœuvre with his main body against an enemy, whose initiative is checked and whose forces are, at least partially, committed to a plan or line of action.

The leader can use the fixed point created by his protective guard as a pivot. He can swing his force round to the right or left of it, or he can directly support the protective guard on one or both flanks. If the point is movable, he can arrange his force and strike when the position is most favourable.

Manœuvre implies a choice of ground for the disposition of forces, so that the enemy cannot know what direction those dispositions will take, and a surprise may result, his own dispositions not being ready to meet them.

The general advanced guard, helped by the rest of the protective system, gives this choice of ground, it affords the necessary secrecy, and it diminishes the enemy's readiness to meet the blow.

Hence the term "Pivot of Manœuvre" expresses very accurately what the general advanced guard does for its army when thus used. It is

applicable to the smallest as well as the largest forces, but the idea is frequently neglected or forgotten.

The action of the advanced guard is the introduction to the battle, the whole course of which greatly depends on this gaining-of-contact phase. The leader, who knows how to use his advanced guard correctly, will seldom be found wanting in what follows. The plan for battle, or at least the evolution of a considerable portion of the plan, will generally depend on the conduct of the advanced guard, which, on the other hand, must be regulated on this plan. It therefore seems imperative that the leader of the whole force should be with the advanced guard as long as possible. If the endeavour is made to issue instructions to the general advanced guard, or indeed of any advanced guard, it will be seen at once how difficult this is, it being impossible to provide for the many alternatives open to its commander.

Hence arises the great danger that an advanced guard commander will commit the leader to an undesirable course of action. A unity of doctrine in an army undoubtedly lessens this risk, but, in modern times, when "initiative" is so strongly encouraged, it cannot be altogether eradicated, except by the presence of the leader, so as to give an initial direction to the action of the advanced guard. In the case of a general advanced guard this is of the utmost importance.

One of the latest attacks against this principle of the general advanced guard is made by Colonel Mordacq in his *Études stratégiques*. He maintains, to begin with, that, though admissible in tactics, its introduction in strategy violates one of the great principles, namely that of economy of force. Though Napoleon undoubtedly used such a system in several campaigns with excellent results, he considers that the enormous increase in the strength of modern armies has rendered it inapplicable. On a strategical front of fifty or sixty miles, such as may now be expected, such a protective force would not succeed in procuring any really important information, nor would it "fix" the enemy, but would run the risk of being crushed before the arrival of assistance, or might compel the leader of the whole force to fight his battle where he did not wish. He maintains that in modern wars the use of a general advanced guard is only to be found on the side of the conquered, the Austrian I. Corps, afterwards reinforced by the Saxon corps, in 1866, being an example. The German dispositions in the opening phases of the war of 1870-71 were very faulty. Their cavalry and tactical advanced guards failed to secure the necessary liberty of action for their principal forces, but he urges that the use of the general advanced guard principle would equally have failed, and that the only system applicable was that of mixed detachments supporting the independent cavalry.

He gives the involuntary use of the III. Corps, at Mars la Tour, in the rôle of a general advanced guard as a warning of the danger of such a body. Though he quotes no example of the Russians having employed a general advanced guard in 1904-05, he states that Kuropatkin was imbued with its principle, and implies that he was therefore beaten by the Japanese, whose operations showed no trace of one. In conclusion, though he first stated it was then permissible, he will have nothing to do with it tactically, because armies now fight at distances apart ten times greater than in Napoleon's time.

Von Clausewitz tells us clearly what this principle of the economy of force in strategy is:—

“The first and the most important of the rules, which should guide the commander-in-chief, is to keep his forces united. He should only detach from the general mass of his troops what is absolutely indispensable in order to meet an urgent necessity.”

It can be put in a slightly different form:—

“Devote the greatest possible number of troops to the principal operations, the least possible number to secondary operations.”

Does the general advanced guard really offend against this principle? It appears to do so only when improperly employed. It is essentially a fighting body directed against the chief objective, and it can in no sense be regarded as devoted to

secondary operations. Its employment constitutes an urgent necessity. It is true that it begins to fight before the rest of the army, and if this fighting is allowed to become a separate combat, that is, if its crisis is reached before the rest of the army can take part in it, thus fusing it into the main battle, then the general advanced guard is improperly used. It is of necessity compelled to contend against great superiority, and a separate combat, if carried to a conclusion, must nearly certainly end in its defeat. The enemy has thus gained a victory, and he proceeds with increased confidence to fight a second battle, on a new plan, against a force, a material portion of which has already been rendered incapable of fighting seriously. The extra exertions, which he has used in overcoming the general advanced guard, are more than counterbalanced by his gain of *moral* and the adversary's loss of it. The action of the protective force is here a true instance of the successive application of force in a strategical sense.

On the other hand, if the crisis of the combat of the general advanced guard can be postponed long enough to allow of the main body's converting this combat into a part of the main battle, it no longer takes place in the form of a separate event. Even if the enemy is eventually successful against the forces which formed the general advanced guard, such success may be out-weighed by want of success elsewhere in the battle, and this is very pos-

sible, because the main body has had the advantage of falling on the enemy engaged in using great efforts to overcome the protective guard. There are not two battles, but a single battle, of which the combat of the general advanced guard, until supported directly or indirectly, is the introduction. Its action is thus not a successive application of force in a strategical sense.

A successive application of force in battle is not only permissible, but it is necessary. Every system of tactics provides for it. The action of the general advanced guard is merely such an application of force, and is tactical in its nature. Though possible, it is not necessary that the employment of a general advanced guard should lead to a successive application of force in a strategical sense ; if it does so, it is not necessarily the fault of the system, but is due to a want of judgment as to its strength, distance, or method of use. In war any method, any system, may fail,—none is infallible. The Napoleonic wars amply prove that, with the forces then employed, it could be used without this happening. Modern inventions and improvements have a marked tendency to increase the duration of a battle, and greater numbers have the same effect. Far from being decreased, the delaying power of a large body, such as the general advanced guard, has been increased.

A great deal of the opposition to the employment of a general advanced guard may, it is con-

sidered, be traced to the vagueness of the dividing line between tactics and strategy. There have been very numerous definitions of these terms, but not one can be regarded as altogether satisfactory. Von Clausewitz states :—

“ There are two absolutely distinct activities, viz. tactics and strategy ; the first orders and directs action in the combats, while the second connects up the combats with each other so as to gain the objects of the war.”

Anyone who has carefully studied *On War* will agree, however, that he does not succeed in proving their absolute distinctiveness and it seems very doubtful if this can be done.

The modern French school deals with the matter thus :—*

“ Strategy is the art of the chief command, embracing not only the action of the commander-in-chief, but nearly the whole of that of army commanders placed under his orders, and a certain portion of that of commanders of army corps which form the armies. Tactics is the method of employing units of any arm placed in a subordinate position, on the march and at rest, as well as in battle.”

There is no doubt that the matter has been complicated by the great increase of forces, the facilities for their rapid transfer from one point to another, and the high probability of almost in-

* Dictionnaire militaire.

stantaneous intercommunication, no matter what their distance apart.

The general advanced guard may be looked on as a strategical body, because it is directly under the orders of the Commander-in-Chief. Its action, till merged into that of the whole force, may possibly be regarded as partly strategical. In the fighting retirement the partial combats in which it engages, and in which a crisis is not reached, may be said to constitute strategical actions, but when it stands to fight, its combat should be merely the introductory phase of the main battle, and would seem no more strategical in nature than the action of a firing line up to the time it is reinforced.

The youngest officer would smile at the idea of employing a strategical reserve, but if asked to explain what such a body really meant now-a-days, would find great difficulty in doing so.

The action of the independent cavalry, when it fights for supremacy with the similar hostile body, seems undoubtedly strategical, but the latest edition of our Field Service Regulations evidently does not like the expression "strategical" cavalry, though it somewhat curiously applies the word to the general advanced guard. In the same way, it is very hard to say where strategical reconnaissance ends and tactical reconnaissance begins.

A body is arbitrarily christened "strategical," and then condemned on account of its name, regardless of the functions it really performs. It is

wise, when in the borderland of tactics and strategy, to follow the example of the German regulations, and avoid any hard and fast application of these terms.

When an army of three or four army corps is acting separately, the arguments against the general advanced guard are not strong, but when several of such armies are working in close connection, the idea of a general advanced guard for the whole force is certainly more open to question.

A short consideration of what might happen in the opening phases of a war between France and Germany may help to throw some light on the subject. There is a common frontier from Diedenhofen to Mulhausen of some 140 miles in a direct line. The southern third of this is generally regarded as impracticable for very large bodies of troops. On either side of the remainder of the frontier we find, even in peace, a mass of frontier troops arrayed opposite each other, at a short distance, and in a high state of readiness. Their delaying powers are increased by an elaborate system of permanent fortification. On the declaration of war, perhaps even without it, under the protection of these frontier troops, practically the whole of the first line forces of the two countries are mobilized and despatched by rail to selected positions, forming opposing matches, each of 700,000 or 800,000 men, organised into four or five groups or armies. Second line organisations follow these,

making several armies more, so that there may be from one to two million men opposed to each other on either side. The concentration of the several armies, in rear of the frontier troops, is supposed to be worked out in peace up to the smallest detail, and every provision made so that the utmost rapidity may be ensured. The frontier troops require less for their completion, which is thus quicker than that of the remainder. Certain units, not actually on the frontier, are given extra facilities for rapidly reinforcing the troops already there.

It is by no means essential that this concentration should take place in one manner only. There may be several alternatives. The side which can concentrate quicker has the great advantage of being able to act first, and is thus the less dependent on various schemes of concentration. The side which is slower has naturally a great disadvantage, but this is to some extent decreased by the resistance of the frontier troops, assisted by permanent fortification. It is always possible for one side, the frontier troops of which are stronger, better arranged, or more quickly reinforced by special corps, to act offensively before the completion of the concentration of the main forces, and we can even imagine the side, the main concentration of which is the slower, being able to act in this manner.

Here we have the whole idea of the general ad-

vanced guard on the largest possible scale. The frontier troops, strengthened if necessary, form the general advanced guard, which is in a heightened condition of readiness. The main concentration is the manœuvre of the main body. The whole country is the zone of manœuvre secured by the general advanced guard. Once the troops have been detrained, the manœuvre of the main body is completed in its great outline. The general advanced guard has served its purpose ; there is now no further question of manœuvre as a whole, it is the battle which has to be fought.

There is no claim that the manœuvre of the whole forces, which the general advanced guard renders possible, is the only manœuvre in the battle. It leads up to the first great general disposition, best suited to the conditions as ascertained. Subsequent developments may demand further manœuvres of the forces, which remain at the disposal of the leader. The idea of the general advanced guard continues ; the units which are engaged, in consequence of the first great manœuvre, together with the general advanced guard, form a force which, if not strong enough to conquer, " fixes " the enemy still more, and gains information about him, enabling the final reserve of the manœuvring mass to be used at the point where its offensive action will have the best chance of success, either to envelope a flank or to penetrate the front. It is only this secondary class of

manœuvre that is possible, when once the great bulk of the forces has been detrained.

The whole railway system of either country is employed to carry out the primary manœuvre, which is based partly on information available in peace, and partly on political considerations. The concentration is designed so as not only to counter what the enemy is likely to do, but so as to render possible an offensive line of action which seeks to compel the enemy to conform. Once the bulk of the forces has detrained, their mass is so enormous and so unwieldy, and the space available is relatively so small, that it would appear to be impossible to obtain a full power of manœuvre, as a whole, except to advance or retire. The railway system, however dense, cannot contend with any local transfer of 700,000 or 800,000 men. It is, however, not the same as regards the secondary manœuvre, namely that within the battle area of a relatively small portion of those forces.

The capacity of railways for the rapid transport of troops remains still undeveloped. Strategical works often enunciate principles concerning their comparative limitations for this purpose, which are, to say the least, greatly exaggerated. We often see vast concentrations of undisciplined civil masses effected at a single point within a few hours, without the slightest hitch or accident. The entraining of the horses and vehicles of military units requires more time than that of men,

but, on the other hand, the detraining can take place within a far more extensive area, and thus at more points, than in the case of a crowd being transported to a small centre. Several lines of rail will often be available, and only a comparatively low rate of speed is required. The amount of rolling stock is generally very great, and the length of platforms at large stations is considerable. Given a commander who has absolute power of control over the railways, and an ample staff, thoroughly instructed in such work, and there is no reason why an army corps, or even several army corps, should not be transported from one area to another in twenty-four hours. The great strategist of the future will be he who, regardless of futile objections of a technical nature, knows how to get the absolutely maximum results out of the railways at his disposal. This power of rapid transfer of large forces will be greatly to the advantage of the side acting on this strategical defensive, as it can use its own railways, which should be in thorough working order. Forces acting offensively, which have penetrated into the enemy's country, will probably find the railways destroyed in many places, and, even if this is not the case, will have to work a foreign system.

The probable course of events leading up to the first great battle in a war between France and Germany is dealt with in *La doctrine de défense nationale*, by S . . . In this it is stated that, with-

out doubt, the Germans can concentrate their forces more rapidly than the French, and that they will probably take decisive action in two directions, namely an army which will march across Belgium and Luxemburg towards Mezières to envelop the French left, and another moving south-west from Sarrebourg to penetrate the French front. The great mass of the cavalry would act in advance of the former, and there would be every advantage in employing a general advanced guard, as there is plenty of room for it and a somewhat indefinite object to strike. In the other area the conditions are not so favourable for a general advanced guard, but there would be a possibility of employing one. The rest of the front would be held comparatively thinly by containing and connecting forces, assisted by the permanent defensive works already in existence. These, too, would act offensively when the conditions became favourable. Similarly on the French side, there would be opportunities for employing a general advanced guard for one or two of their armies, notably for the one on their extreme left.

After the first great battle the beaten forces which escape will be almost inevitably broken up into groups, and, for some time at least, will hardly be able to work together as a single body. One group, possibly an army, which is not too much demoralised will, doubtless, be used so that, under its protection, other groups will endeavour to con-

concentrate again, and new formations will be brought up. Here again we have the idea of a general protective guard for the entire forces.

Success will probably force the conqueror to an eccentric use of a material portion of his forces. It is very unlikely that the whole of the forces will at once advance in one great mass in pursuit in a single direction. If the victory has been so easy that all the forces are capable of immediate advance, the question of supply alone would make this impossible. Most of the railways will have been destroyed, and fortresses, till reduced, will totally block the use of others. Forces of such dimensions cannot move far without railways, especially in a country previously exhausted by their opponents. But it is almost certain that victory will only be won after enormous effort. Many units will have been rendered incapable of movement till reorganised ; ammunition will have been exhausted, units almost hopelessly entangled, and arrangements generally in a more or less chaotic state. A portion only of the victorious side will at once be available and capable of moving in pursuit of the principal hostile defeated mass. Behind it reorganisation will take place, communications will be restored, and, at least, the smaller strong places astride the railways will be overwhelmed. Here again we have the idea of a general advanced guard for the whole forces, though it may be called by some other name.

If one side originally concentrates at a considerable distance from the frontier, the other side's difficulties in advancing will be very great. A general advance in one great mass can hardly be expected. One army, perhaps two, owing to their line of advance being easier or with a definite object, such as the turning of some natural or artificial obstacle, will be pushed forward. This will probably be on one flank, but none the less it will constitute a general advanced guard, and its commander should conduct his force so that it can fulfil such a rôle, though it may be called an advanced mass of manœuvre. It may not afford such an unwieldy body as the remainder of the forces full powers of manœuvre in any direction, but it will undoubtedly increase their freedom of action. In great modern wars battles will not be fought without preliminary combats for the gaining of contact.

As regards the historical examples quoted by Mordacq, it appears easy to answer them. In 1866, the main body of the Austrian army had an excellent opportunity to fall on the divided Prussian forces, but its commander seemed incapable of adopting any energetic course of action, and any idea of manœuvring the main body was absent. His defeat can in no way be imputed to the detaching of the I. Corps. In 1870, the German protective dispositions, at the beginning of the war, were most dangerously weak, but they have re-

mediated this now by a veritable general advanced guard army, though they doubtless do not apply that term to their frontier protective corps. The III. Corps at Mars le Tour certainly resembled a general advanced guard. This being involuntary, it was perhaps only natural that its rôle as such was not appreciated by Von Moltke and Von Alvensleben. Had the III. Corps been intentionally used as a general advanced guard, it is certain that both its action and that of the 1st and 2nd Armies would have been very different. It is also possible to point out that a single corps was insufficient for the purpose. If on one hand we quote the risk it ran, on the other it is only fair to assert its extraordinary paralysing effect on the French army, as well as the great results arising from its action. It hardly appears to be a good argument to use against the employment of a general advanced guard. In the Russo-Japanese war there appears to have been no very marked case, on either side, of the use of a general advanced guard, unless we take that of the Japanese 1st Army, which by its threatening position assisted the disembarkation of the 2nd and the nucleus of the 4th Army. The Russians throughout, though extremely fond of mixed detachments, seem to have been particularly unhappy in their employment of protective bodies. To use Kuropatkin's laudable desire for information as an argument against the general advanced guard, seems to be, to say the least, particularly unconvincing.

Omitting for the present all reference to aerial reconnaissance, there can be no doubt that ordinary reconnaissance, of every description, has greatly increased in difficulty of late years. Great numerical strength of forces necessitates much depth in the dispositions adopted, and adds to this difficulty. The void of the modern battlefield is one of its most marked characteristics. This difficulty applies to the smallest patrol and to the largest reconnaissance in force. If a leader always waits for definite information before taking action, he will not act at all till driven to defend himself by a more enterprising opponent. There is, however, the alternative method of adopting a plan for action, from what we do know of the enemy, no matter from what source. Our dispositions can at once be made in accordance with the action we desire to take, and with the course we consider the enemy should best adopt.* We do not cease to reconnoitre or minimise the importance of information we *can* thus obtain, but we put it, as it were, in the second place. Our plan and primary dispositions are the ruling factors. It is evidently necessary, for the side which starts first, to have an independent plan and this entails a disposition of forces. There is no necessity why modifications

* Von Moltke:—"In order to solve a tactical problem we must first put ourselves in the position of the enemy and ascribe to him the most judicious measures."

Von der Goltz:—"Are not the enemy's rational measures the best foundations we can give to our own combinations?"

should not be made in this plan and consequently in the dispositions, if the information we *do* gather calls for them urgently, and they are possible. There is no doubt that modifications on a large scale in the dispositions of the enormous forces now employed require great space and time for their execution, and they lead to complications as regards lines of supply and various other difficulties. Many consider such difficulties insuperable, and think that, when acting offensively, it is better to lose no time in finesse as regards dispositions, but to act in the quickest manner possible, without material variations in dispositions, even though these may not be the best for the situation, which may have been originally wrongly appreciated, or, later on, modified by the independent will power of the adversary. Our dispositions and the use of the offensive are expected to create the situation up to, and including, the first great battle.

The Germans are generally credited with the determination to carry out this principle in a very marked degree, and French writers consequently often refer to their methods as "brutal." Captain Culmann, of the French General Staff says :—

"The Germans consider that the secret of victory, and even of security in war, lies above all in a strong will, dominating that of the enemy, and carried into effect with overwhelming rapidity and the utmost energy.

With them it is not the situation, accurately known, that should rule the offensive, but a rapid and forcible offensive which should create the situation of which full advantage is to be taken."

Von Bernhardi, who may be regarded as one of the most strenuous advocates of this principle, is very emphatic on the subject :—

" The plan of concentration should be founded on a resolution to act in a manner already determined ; it is above all necessary to select lines of attack so that a force may be directed against one flank of the enemy, and his communications threatened at the same time."

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" This determination to operate according to a preconceived plan must be carried to such a point, that the enemy, in spite of any projects he may have been able to form, shall be compelled to submit without reserve to the law laid down by our own initiative."

Such a system assumes an inferiority in the opponent. This may be in material matters, such as numbers, organisation and readiness, or in moral characteristics, such as confidence in success, self-sacrifice and national stamina. If pride in superiority is really justifiable, the system has a good chance of success, but when the pride is ill founded a terrible awakening may await the

leader who adopts it. If it fails, recovery is very difficult and reaction very great.

In such a system protective guards are only required to allow of columns deploying in their local areas, the idea of the combined manœuvre of several columns, and reconnaissance by a strong force, are absent. The time and space required do not refer to the forces as a whole, but only to the individual columns. General advanced guards tend to become superfluous, though the advanced guards of columns remain necessary.

As regards reconnaissance, it seems to be thought that the outline or contour of the enemy's dispositions, as established by the independent cavalry, is sufficient. It seems hard to reconcile the expenditure of a great portion of the energies of nearly the entire cavalry on such a task. The adoption of such a preconceived plan assumes the very knowledge for which the independent cavalry is sent forward to seek.

If the side possessing real superiority can advantageously avail itself of such a system, it is certainly otherwise with the side which is inferior. The weakness of the system is the rigidity of its dispositions, and it is necessary for the inferior side to take advantage of this weakness by the retention of the maximum of manœuvring power, so that the hostile blow may not be delivered in the preconceived manner, or, if delivered, may fall amiss. A strong protective system, not a mere

cordon of tactical advanced guards, will alone render this possible. If the reconnoitring power of the general advanced guard has diminished, its attractive power remains, and its resisting power has increased.

The invention of flying machines has suddenly revived the possibilities of efficient reconnaissance to an extraordinary extent. Movements of large bodies of troops by day can no longer be hidden from the enemy. The greater the amount of movement, the less secret can dispositions be kept. Though the advantages of the offensive, necessarily connected with movement, as a form of making war, remains, the strength of the defensive, which is more closely allied with rest, has increased, though its negative results preclude its general adoption, except locally or temporarily. There will be a tendency for war to become more like the game of chess, where the adversary's dispositions are all known. The advantage of skill in the movement of pieces, otherwise manœuvre, in no way ceases, and would appear to have increased, as less is left to chance. The possibility of surprise is more limited in time and, perhaps, in force. We cannot confine our movements to the hours of darkness for a long series of days, as it is too exhausting and demoralising, but we can do so for a limited period. It may be said that our strategic dispositions must be known, but our tactical dispositions may be hidden either by darkness, or

by cover, if at rest. Unless our adversary is fixed, we cannot act on a preconceived idea without running the greatest risk. He will at once know what we are going to do and, although inferior, he can take measures to cause our predetermined plan to fail. He will escape from the net in which we wish to catch him, and counter-attack us in our weakest spot. The more unchangeable our plan and dispositions, the less chance they will have of success.

The general advanced guard does not appear to have lost its power to "fix" the enemy. It still constitutes an obstacle which must be removed or neutralised before the enemy advances further. Its ultimate rôle is defensive, a condition of comparative rest, making it possible to disguise its dispositions, in many cases. The attack on it, which necessitates movement, cannot be hidden, unless carried out at night, and night attacks, when not directed against something very definite, are likely to fail. It can employ its reserves to prolong its line, or, where necessary, counter-attack with more certainty than hitherto. It may, on the other hand, be stated that the enemy will know that it is a protective detachment, and he will be able to estimate its strength accurately. Consequently he need only allot just sufficient troops for the purpose of attacking or containing it. The general advanced guard, however, is a large body, the resistance of which can probably be prolonged

into darkness, during which its own reserves, if it still has any, can be moved secretly to the point most threatened. It also lies within a distance of its main body, which does not appear to be too great for the use of darkness to cover movement, thus making possible the arrival of reinforcements at unexpected points. It has still the power of creating a situation, with much of the "unknown" in it, but doubtless less so than formerly. On the other hand, the attack on it will be harder, as it cannot act so well by surprise, which will be more difficult in offensive than in defensive action.

In the absence of actual war experience, there seems nothing to prove that the "fixing," or paralyzing effect of a protective guard has been in any way diminished owing to the introduction of flying machines.

If we admit that the general advanced guard can, as formerly, still *attract* to itself undue attention, thus disturbing the enemy's dispositions as a whole, and creating an unnatural position for him, flying machines will undoubtedly enable us to appreciate the effect far better. The reconnaissance, which the general advanced guard still renders possible, is that of an enemy whose dispositions are fixed to a material extent, and it retains its superiority over any reconnaissance, however accurate, of dispositions which are readily changeable.

The manœuvre of the main body will take place

over an area which is known, namely the zone of manœuvre between it and the general advanced guard. Such knowledge will make it possible to use darkness to cover movement, and effect a surprise, far more easily than in the case of the enemy who, if he passes the general advanced guard, has to move his columns in an area of which he knows little, and in which no preparations will have been possible.

In spite of flying machines the principle of acting on a preconceived idea will doubtless continue. It is often a necessary and advantageous principle, but its application has been rendered more dangerous. It must often remain a very material factor in our calculations, but we cannot abandon ourselves to it to the extent that this was allowable when efficient reconnaissance was almost impossible. Although our desire may be to preserve our dispositions, and this will deeply influence our course of action, we must still be able to change when change is really necessary, and this will certainly be more frequent than before the introduction of aerial reconnaissance. Such power to change can only be ensured by an efficient system of protection, including the use of the general advanced guard, and there is no reason why such a system should interfere with our initiative, or with the rapidity of our offensive action.

Chapter XII.

OUTPOSTS.

THE word "Outposts" is very vague. The English official meaning seems to be that, with a small force, it is the entire body employed to secure protection at rest, although, when the dispositions which are recommended are closely examined, this would appear to be questionable. The Germans, who clearly recognise the permanence of mission of the advanced guard, whether in movement or at rest, apply the word "outposts," or "Vorposten," to the sum of the protective detachments sent out by the advanced guard at rest, the remainder of that body being called the "main guard" or "Haupt-Trupp," and this also continues in advance of the main body as additional security. The French idea is nearly the same.

Whether the protective cavalry is included or not, seems very doubtful. The local measures, taken by units of the main body for their security at rest, may, or may not, be regarded as forming part of the outposts.

In the case of large forces the meaning of the

word is still more indefinite, as it apparently leaves out of account the dispositions of the general advanced guard.

There is nowhere any variation in the term with reference to the position of the enemy and the course of action being followed by the army. For protection in movement we have the distinguishing words "advanced," "flank," and "rear" for the guards, but for protection at rest, in every direction, only one word—"outposts." To avoid confusion, the word "outposts" will not be used in what follows. The term "protection at rest" embraces all dispositions of protective forces, and is sufficiently definite for our purpose.

As has already been seen, the introduction of movement limits the thoroughness of the dispositions which can be assumed by a protective guard. Infantry units must march by roads, and these must not be circuitous, or delay will result. The consequence is that infantry detachments from a main protective guard are generally very few, being often confined to the vanguard alone. We endeavour to make up for the want of completeness in the infantry dispositions by the use of cavalry in advance of the protective guard. The extra mobility of mounted troops makes it possible for it to complete a system of security, approximating to thoroughness, without delaying the main body.

It is evidently impossible to vary our disposi-

tions constantly, so that they will always be the best for the everchanging features of the country through which we pass. Hence we adopt an arrangement which is likely to be generally suitable for the march, and only change it if absolutely necessary. The mounted troops have to do nearly all the hard work, and the infantry and field artillery are spared, for, unless the enemy is encountered, there is no reason why these latter arms should have more to bear, on the march, than the units with the main body. When the protective guard halts for some time, the conditions are different. The infantry can radiate outwards, and by its detachments form a complete protective system, approximating to the theoretical dispositions given in Chapter iv. The distribution can be made so as to suit exactly the features of the country, where the protective guard has to rest. The infantry, which has been spared on the march, is now called on to use extra exertions, and the mounted troops are given the maximum of rest possible. It must always be borne in mind that the infantry and field artillery can be periodically changed, but that this cannot be done in the case of the mounted troops, who, according to the usual custom, are practically all allotted to reconnaissance and protection, though the horse is more likely to succumb to continued excessive exertion and exposure than a foot soldier is.

It is these points which introduce differences in

the dispositions of protection in movement and at rest. The main principles are identical in the two cases. In both we approximate to the same theoretical arrangement, as closely as the circumstances permit. We must remember that, because the main body is at rest, there is no necessity why all the protective forces should be at rest also. They may be engaged in executing a manœuvre, for example, when the main body has occupied a defensive position, and the protective guard is falling back. On the other hand, the protective force may be at rest, while the main body is in movement, as when the former has fixed the enemy, and the latter manœuvres to gain an advantage. A force at rest generally requires practically the same time and space to lay aside its unreadiness as when in movement, and the strength of the protection must be the same. The protective guard has a permanent mission to protect the main body, whether the conditions are those of movement or rest. This principle is frequently misunderstood, and there seems to be a widespread idea that there is one system for protection in movement, and a completely different one, generally far more cramped in every way, for protection at rest, and that these duties are performed by different bodies.

Protection at rest is generally, to a great extent, associated with the halt, which every body of troops must make, once in the twenty-four hours,

so as to regain strength after the exertions of the march, and, as this halt usually includes the hours of darkness, the dispositions have a tendency to assume a form suitable for night alone. A force may, however, remain halted for many days, waiting for its own completion, or for a development of the situation. In the case of a daily halt, the activity of protective forces is necessarily reduced to a minimum, but it increases when the halt is for longer, and this particularly applies to the action of the mounted troops.

The spreading out and reclosing, in the system of protection at rest, entails considerable extra fatigue, especially on the infantry, and this is very trying when it has to be carried out after and before a long march. The distance which can be gained from one halt to another is thus reduced for this infantry, and consequently for the whole force. We endeavour to get over this by periodical relief, as will be shown later, but what we have chiefly to bear in mind is that any unnecessary development of the system of protection at rest is to be avoided, because it is actually harmful. Thus, when our main body is known to be several days' march from the enemy, our dispositions are limited to what is necessary to keep off hostile reconnoitring parties and minor insults. As we approach the enemy, the system of protection grows in completeness with the increase of danger, till it reaches a full state of development, only to

diminish again for want of space, as battle is joined, till it may finally be reduced in the critical phases of the battle to the posting of sentries within a few yards of those of the enemy.

But as the strength of our protection diminishes from its full development, for want of space, our forces lose their freedom of action, and they become more and more fixed. To compensate in some measure for the weakness of the protection, the state of readiness has to be increased. The convenience and rest of the troops have to be gradually sacrificed, and the moral strain becomes greater and greater.

When the advanced guard adopts a fully developed system of protection at rest, it implies that there is a possible danger of the enemy's seriously availing himself of the necessary unreadiness of the main body. There must thus be a still greater danger to any body of mounted troops, in front of the advanced guard, which requires to rest. Cavalry at night are particularly vulnerable to attack. To provide for its own efficient security entails the employment of a high proportion of the force, and the work is hard on man and horse. Provided always that touch is maintained with the enemy by means of patrols, it is far less exhausting, and much less dangerous, for the protective cavalry to fall back at night under cover of the advanced guard, even though this may entail one or two hours' march, than to remain in an exposed posi-

tion and be obliged to adopt elaborate measures for its own security. Hence, when the advanced guard fully develops its protective arrangements at rest, the protective cavalry will at night, as a rule, be withdrawn behind it. If the halt continues next day, the cavalry is again pushed forward, and, by its presence in front of the advanced guard, relieves that body of a considerable amount of its protective work.

The independent cavalry may or may not have to take shelter behind the advanced guard. If it has been defeated in its combat with the rival independent cavalry, this will probably be the case. On the other hand, if it has been successful, it may be a considerable distance away, probably on the enemy's flank, where it must provide for its own security.

As in the case of protection in movement it would appear advisable, before passing to larger forces, to examine the protection at rest of a single column acting independently, and moving by a single road.

There is little to be said on the subject of the composition of such protective forces, as the same bodies which have been charged with the protection in movement will have to ensure the protection at rest. It is true that there may be exceptions to this rule, especially as regards local protection, but these can be better considered later.

When a column, which is on the march on a single road comes to rest, the extent to which it closes up on its head depends on several matters. A close concentration increases its readiness for action in its immediate neighbourhood, but decreases its marching powers, if the advance has to be continued the next day.* Shelter for man and beast is a matter of the utmost importance, and, if this is to be gained, closing up on the head will generally result in a spreading out to either side of the road, possibly for several miles. This increases the length of the march, and doubly so, if it is resumed next day by the same road. This broadening of the front, occupied at rest, will have a tendency to increase as the probability of serious

* A simple example will help to explain the matter :—

A column is marching by a single road ; its length in column of route is 18 miles ; its pace is 3 miles an hour ; the period during which it can march, owing to the number of hours daylight or the necessity of leaving the road clear for other purposes, is 10 hours.

If the column is camped close round point A, and at the end of its march must camp close round point B, the distance it can march is 12 miles, for the tail of the column cannot start for 6 hours after the head, so has only 4 hours left in which to march.

If the column is billeted along the road behind A on a depth of 9 miles, and at the end of the march can be similarly situated as regards B, it can march 21 miles, for the tail of the column can start 3 hours after the head, so has 7 hours left for its march.

Similarly if the depth of the column in billets at A and B is 18 miles, it can march 30 miles.

Of course, these longer distances will be somewhat reduced by the longer halts, and the slower pace necessary for a long march.

It was by the use of this principle that Napoleon's troops were able to cover so much ground in such a short time. Von Moltke understood the principle, and used it to good effect in 1870-71. General Bonnal in his writings has clearly shown the very great advantages which can be gained by an intelligent use of it.

action becomes greater, and consequently our plans more fixed. The same widening out takes place, if in movement, when the different units, such as regiments, brigades and divisions, diverge from the column of route, before entering into action, and use such roads or tracks as are available, or march across country. The Germans call this the "Entfaltung." It will simplify matters, if it is remembered that such diverging units would secure themselves by at once pushing out their own protective guards, wherever necessary.

We have thus the two cases, namely, when the force to be protected has practically no breadth, and when the front is considerable.

Directly an advanced guard halts, its commander has to make the best protective arrangements which the state of rest now permits, but which were previously impossible, on account of the necessity for movement. Thus additional protective guards can be radiated out from the main body of the advanced guard. The advanced guard's protective guards, in turn, radiate out their own protective detachments, and so on, till we reach a line of very small infantry bodies, so close to each other that even small parties of the enemy cannot penetrate the screen without being observed.

Thus, in shape, the whole protective disposition resembles a fan, which is divided into as many principal sectors or sections as there are protective

guards sent out by the advanced guard, each being responsible for the protection within its own sector. Similarly each sector or section is subdivided into as many sub-sectors or sub-sections as there are protective detachments deemed necessary by the commander of each protective guard for its protection. This process is continued till the furthest out bodies are reached.

What is left of the advanced guard, after sending forward its protective guards, forms the general reserve of the whole protective system emanating from it. What remains of a protective guard, after pushing out its protective detachments, constitutes the sector or section reserve. Going still further out, we have the sub-sector or sub-section reserve, and so on.

The theoretical idea is that each body should not protect itself with more than half its own strength, less if possible, otherwise the protective disposition tends to become a cordon system. Each reserve should thus be at least equal to the bodies emanating from it. The depth of the whole protective system, from the general reserve to the farthest-out line of picquets, and the number of intermediate bodies, thus increase with the strength of the protective force.

Every country has a different system of nomenclature for the bodies thus radiating outwards. The British regulations appear to leave out of account altogether the general reserve, the biggest

body mentioned being a "reserve," which corresponds to the sector or section reserve. The bodies in advance of this reserve are called "outpost companies," these push forward "detached posts" and "picquets," which in turn protect themselves by "sentries" or "sentry groups."

The first difficulty which arises is to gain some idea of the front and depth of the protective dispositions of the advanced guard in full development.

When forces are in movement, we have seen that the duty of really serious opposition to hostile attack falls on the advanced guard, and its use or threat of force alone can ensure the time for the main body to lay aside its necessary unreadiness. When at rest, the advanced guard must continue to perform this task in its full sense, whatever the position of the protective cavalry, or whether it is day or night. The efficient performance of this duty requires concentration, only modified by the necessary dispositions for the safety of the advanced guard itself. The final object of the advanced guard, even at rest, is to work united, and not to be driven in different directions. Just as when in movement, this necessitates the advanced guard's being pushed well forward to give the necessary space for the manoeuvre of the main body. It must be remembered that the action of the advanced guard may have to be offensive, as well as defensive.

When forces are in movement, the duty of screening the main body and the advanced guard is, on most occasions, principally performed by the protective cavalry, and this will continue to be the case when they are at rest, as long as the protective cavalry is employed in front of the advanced guard, but whenever it withdraws behind that body for safety or rest, and this will frequently be the case, especially at night, this duty appears to fall on the advanced guard. To be really efficient for this screening, its dispositions would have to cover a very large front, increasing directly with the distance of the advanced guard from the main body.

The dispositions to which these two duties tend are thus in direct opposition. There cannot be the least doubt that by far the most important protective duty of the advanced guard is its resistance to serious attack, and the gaining of time and space for the main body. The less important duty of screening it from "insults" must give way, especially as it is possible to provide for it by other means, namely by a system of close or local protection from the main body itself, as will be seen later. Any endeavour of the advanced guard to extend itself too much, so as to screen the main body, leads to an insufficient depth of formation, and, consequently, to a want of manœuvring and delaying power, and an impossibility of unity of command.

The dispositions of the advanced guard make no pretence of directly stopping hostile incursions except on a small front, but they are rendered more difficult and dangerous. Hostile reconnoitring bodies have to make a considerable detour to get round the flanks. They then move in an area where there is much of the unknown. Time is lost, and there is a high probability of their being intercepted on their return journey. As in the case of protection in movement, large bodies which avoid the advanced guard in proceeding to attack the main body, lay themselves open to be taken in flank and rear by the advanced guard. In screening itself, the advanced guard materially assists in screening the main body.

When the halt is only for a single night, the march being resumed next day, the time for efficient hostile reconnaissance, by means other than flying machines, is lacking, and it is generally agreed that an advanced guard need only cover a comparatively small front, but, on the other hand, it is usually held that, when the halt is prolonged, and time for hostile reconnaissance becomes available, the advanced guard must extend its front so as to screen the main body. This idea is opposed to the true method of using an advanced guard, and must be rejected.

In the case of very large advanced guards, such as divisions or army corps, we must remain true to this principle, and similarly maintain their van-

guards efficient for gaining time and space, refusing to break them up into a cordon system for the screening of the main body of the advanced guard at rest. With advanced guards of a brigade or less, the distances involved are small, and it would be pedantic to do so.

We are thus reduced to an attempt to ascertain what length of front the dispositions of the advanced guard should cover, in order to screen and protect that body only.

It must be remembered that the advanced guard stands in a very exposed and isolated position, and is a comparatively small body. It therefore requires extensive protection, but, if the sum of the detachments sent out by it exceeds half its strength in infantry, it is a clear indication that we are sacrificing its power to gain time and space, in case of serious attack, to an endeavour to screen the main body from minor "insults." We may, therefore, assume that the front to be occupied will generally be limited to what can be efficiently secured by about half the infantry with the advanced guard.

The front that a single battalion can efficiently cover naturally varies greatly with the ground, the communications and the natural obstacles that may exist. The action of the advanced guard's protective bodies is essentially defensive in nature, such defence being either stationary, or, perhaps more often, in the nature of a fighting retirement.

Ground where the protective troops are well hidden, have a good field of fire and cannot be easily overwhelmed by the hostile artillery for want of good positions for their guns, allows of their being much extended. If the lines suitable for rapid hostile approach are limited in number by obstacles, such as rivers or mountains, the points to be defended are naturally fewer. By night movements of considerable bodies of troops are generally confined to roads, and all such approaches must be guarded, if possible. Hence the front varies with their number. In close country, or on ground which facilitates surprise,* the front must be relatively small.

When the march has to be resumed next day, great extra fatigue is thrown on the troops that have to move out far from the road, and this should influence the question of allotment of front.

Moral considerations limit the amount of dispersion. The different detachments must not feel themselves too much isolated, or their resisting powers will rapidly disappear. If picquets are more than half a mile apart, mutual fire support will generally be impossible. It is important that they should be able to assist each other, especially in the prevention of hostile outflanking movements. During darkness it is almost hopeless to endeavour to watch all the ground between the picquets by sentries or groups. A system of patrolling is employed. If the distance between the

picquets exceeds half a mile, this work becomes very heavy, and will be indifferently performed.

As will be seen later, a battalion can usually supply four or five picquets only, so that on this consideration the front covered should not exceed about two miles.

Modern military history generally supplies very meagre details on this point, and books of regulations avoid giving the smallest indication, leaving the question entirely to the imagination of the student, or his knowledge of the traditions of the army. It is possible, however, to gain some idea as to the general tendency in the matter from non-official works and the solution of tactical problems in them. Judging from these it may be stated that the front occupied by a battalion will lie generally between one and two miles, varying in accordance with the points already considered.

The general reserve of the advanced guard at rest should be essentially a manœuvring body, which is capable of acting at any point of the defended area, either offensively or defensively. It is necessary to maintain its freedom of manœuvre, so that it can lay aside its necessary unreadiness. Considering the smallness of the force now in question, it is generally held that it is sufficient to guard it from surprise by hostile artillery fire. It should be impossible for the enemy to bring artillery into action against it within effective range. It will be seldom that a commander will care to risk his

artillery within one thousand yards of an undisturbed picquet line. It would, therefore, appear to be sufficient, if the depth of the protective system from the general reserve is approximately two miles. Such a depth appears to correspond closely with ordinary custom in most armies, which are in the habit of dealing with considerable bodies of troops. Without at present entering into a detailed account of their probable action in case of attack, it may be stated that, when the advanced guard consists of about a brigade, this depth appears to allow of efficient mutual co-operation between the different bodies composing the protective system. Their isolation is not so great as to endanger the *moral* of the soldier, but the distance is sufficient to allow of each line of detachments giving ample warning to that lying behind it. We can only regard this as a very general indication, subject to variation, in accordance with the features of the country, the state of the troops, etc., etc.

If, then, we accept these three points, namely, that only half the infantry of the advanced guard can be used, that the front of a battalion should not generally exceed two miles, and that the depth of the protective system should be at least two miles, we find that, in the case of an advanced guard consisting of a brigade, the infantry protection can, at the most, cover only about one-third of the circumference round the general reserve.

It is naturally placed in the most dangerous direction.

At night, or when the protective cavalry is not in front, its limited extent affords the enemy opportunities for reconnoitring round the flanks, but this is prevented by the local or close protection of the general reserve, as will be seen later. It will usually be enough to guard against serious attack, as the enemy, who, avoiding the protected front, tries to fall on the general reserve, will have to expose his own front and rear to attack from the main body.

The commander, having formed an estimate of the front that he can cover, has then to divide it up for purposes of defence. The usual custom is to break it up into as many sections as he has units available, generally battalions, the sections varying in length with their defensive powers. Sometimes, however, the front contains portions, which are naturally divided off from the rest, and which therefore require a separate garrison under a single commander. For example, a portion may be cut off by some obstacle, such as a river ; the defence of a section, extending on both sides of the obstacle, would be very difficult by a single unit, on account of the impossibility of lateral movement within the section. Such an isolated section should have a force of appropriate strength allotted to it. This might be greater or less than a battalion. * We therefore have the two methods,

namely, the allotment of a garrison to a particular front, or that of a suitable front to a fixed unit. The breaking up of units, however, is always to be avoided, when possible, and the usual section unit will be the battalion.

Lines of communication, specially suitable for hostile approach, must not be made the dividing line between sections, they should lie well inside the sections, so as to ensure a stout defence.

Another point, which will influence the allotment of sections, is the position of the advanced guard's protective detachments, such as van guard and flank guards, when it comes to rest. This will not matter much in the case of an advanced guard, consisting of a brigade, but, when it is bigger, it will not only be inappropriate to break up the unity of such bodies, but also to displace them materially to right or left.

As the leader of the whole force will generally settle the position of the general reserve of the advanced guard, so the commander of the advanced guard will usually fix the place of the sector or section reserves. During the night, they should be on or near the most important of the lines of communication, coming from the enemy's position. During the day, concealment, especially against aerial reconnaissance, is of the first importance, but, consistent with this, they must be as near as possible to good roads to ensure ready movement and easy intercommunication. Their

distance from the general reserve must be considered with reference to the ground, accommodation available, and the whole depth of the system of protection at rest, it being remembered that the larger the protective detachment, the greater is the distance allowable. It will generally be about half the total depth of the protective system. The first line of protective bodies in front of the general reserve is that of the sector or section reserves.

The commander of each unit or body, told off to a particular section, must detach to his front the necessary protective detachments, so as to guard his reserve. If he sends more than one, he must consider how the front allotted to him is to be divided into sub-sectors or sub-sections, on the same principles as for the sectors or sections, though, of course, on a smaller scale. Now if the section garrison is a battalion, as will be most frequently the case, the custom of nearly all foreign armies is to detail the next lowest unit, namely the company of roughly 250 men, to each sub-section. If we remain true to the principle of only detailing half a force for its own protection, there can be at most two sub-sections. The British battalion, having eight companies, it would appear, at first sight, that in our case there can be four sub-sections to each section. As will be seen later, however, this is objectionable. The foreign system is perhaps too rigid, and it would appear advisable

to get the greatest advantage we can from our smaller companies, and consequently not lay down definitely that there should be the same allotment for each sub-section, although this might be usually two companies. One sub-section may require two or three companies, and one company may be quite sufficient for another. Our general rule would then be that the section commander should divide his front into as many sub-sections as necessary, detailing the number of companies to each which he considers suitable. He will usually settle where the reserves of these sub-sections are to be placed, the same principles guiding him as in the case of the section reserves. Thus the second line in front of the general reserve is the line of sub-section reserves, generally called the line of outpost companies.

The commander of the sub-section garrison in turn divides up the front allotted to him into smaller divisions, sending forward picquets and detached posts to points selected by him. These in turn have their sentries or sentry groups. If possible, there should be a picquet or detached post on or near every road approaching the area of protection at rest. Thus the third line in front of the general reserve is the line of picquets.

The British regulations seem to consider that a picquet may consist of a single section of a company. Now, on service, a company, detached from the battalion, will very seldom exceed eighty

men. Every company commander knows too well how short of strength his company always is. A section will seldom exceed twenty men, which are absolutely insufficient to perform the manifold duties of a picquet. Normally some thirty or forty men are necessary.* Hence two sections will have to be detailed to form a picquet, and consequently each outpost company can only send forward one picquet. If the sub-sections are only garrisoned by single companies, and there are four of them, we are reduced to a system which gives us four picquets, each of half a company, and four reserves or supports, also each of half a company, which is the purest cordon system.

A detached post emanates from the main body of the sub-section garrison, and not usually from a picquet, though there is no reason why it should not do so if the picquet is strong enough. It is a

* Under ordinary circumstances, the minimum strength of a picquet will be :—

Commander	1
One sentry over arms in 3 reliefs	3
One reconnoitring patrol of 3 men in 3 reliefs	9
Two groups of 7 men	14
Signallers	2
Spare men for messengers, etc.	3
Total	32

Notes :—

Three men are very little for a patrol.

It may have to be stronger.

Two patrols may be necessary.

More groups are sometimes necessary.

If the nights are long, they must be relieved.

One or two men may be wanted for telephones.

sentry group somewhat enlarged, so as to be able to send out a patrol if necessary. If a road or other position requires watching, and it is outside the general line of picquets, either to the front or flank, and so far that a sentry group would be too isolated, say over a quarter of a mile, a detached post can be sent to it. It is generally merely for observation and not for resistance. Picquets, on the other hand, must not only observe, but they must also resist, both by day and night. The picquet line is the foremost line of infantry resistance.

Each detachment is responsible for the defence of its particular section or sub-section, and it is not supposed to go outside it, though it can support neighbouring bodies by its fire.

At night, the disposition depends more on the network of roads than on any other factor. The more important these are, the greater the strength that should be on them. By day, detachments can be readily moved to the most suitable places for action within their sections, so that concealment will be the principal factor in determining their exact positions.

Any unnecessary elaboration of the protective system is a serious fault, and, by day, it can be often lessened with perfect safety. The presence of the protective or other cavalry in front will do away with much of the observing and screening duty of the infantry. If the view is so good that

the approach of the enemy must be detected at a considerable distance, so that surprise is impossible, and sufficient time is available for the larger protective bodies to assume their best dispositions to resist, the smaller bodies, which emanate from them, may be quite superfluous. Picquets may be withdrawn to the outpost companies, and these sometimes to the section reserves. A few observation posts may be all that is necessary. The fewer the detachments, the greater the comfort of the soldier, and the more in hand the entire force.

The German Field Service regulations very rightly observe :—

“ The duty of reconnaissance is only so far incumbent upon the outposts as may be necessary for the protection of the resting troops. More extended reconnaissance will be performed by cavalry unconnected with the outposts. When the outposts are in touch with the enemy, they are responsible that this touch is not lost, even should the enemy shift his quarters by a night march.”

The full development of a protective system at rest implies that the enemy is not far distant, and it is, therefore, difficult to define what is strategical and what tactical reconnaissance. Either the independent and protective cavalries will now be working together, or the leader will have defined their spheres of active reconnaissance of the

enemy, whether he moves or remains stationary. This active reconnaissance, namely, that of pushing in patrols right up to the enemy, and endeavouring to find out everything possible about him, and maintaining touch with him, wherever he may be or whatever he may do, must continue day and night, whether our forces are at rest or in movement. The independent and protective cavalries, whether they seek shelter or not with the advanced guard, remain responsible for this work. It is the passive or protective reconnaissance, namely, that which detects the enemy if he comes close to our protective dispositions, or endeavours to pass by near them, which falls to the lot of the advanced guard. If the rival protective systems are in actual contact, and there is no room along the line of that contact for the work of the independent and protective cavalries, or they are elsewhere, then it is clearly the duty of the advanced guard commander, not only to prevent contact being lost, but to endeavour by the use of patrols, probably consisting of infantry, especially at night, to find out all he can of the enemy by active as well as passive observation.

As in the case of protection in movement, the mounted troops at the disposal of the advanced guard commander, when the independent and protective cavalries are directly under the leader of the whole force, are limited to a portion of that very hard-worked body, the divisional cavalry or

mounted infantry. Mounted orderly duty and local protection of the main body will absorb a considerable portion, the amount much depending on the extent of concentration of the main body at rest. From whatever is allotted to the advanced guard deductions must be made for mounted orderlies, though every possible economy must be ensured by the use of cyclists and technical means of intercommunication. Every detachment, down to, and including, the outpost companies, should have mounted orderlies, and they may be necessary for important picquets. Rest and shelter, especially at night, are absolutely essential for the horses, though infantry commanders are apt to forget it. By night, the use of mounted men will have to be limited to a few standing patrols, pushed well out to the front, and flanks of the line of picquets, on the most important roads, so as to give timely warning of hostile approach. These must be periodically relieved. By day, vedettes and small mounted picquets can be sent out to watch the ground in front and to the flanks of the infantry picquet line, but the extent of their reconnaissance must lie within prescribed limits. Such mounted reconnaissance details may be either under their own commanding officer, who receives orders for their disposal direct from the advanced guard commander, or they may be allotted to section commanders. At night, when their numbers are very

limited, the latter is probably the better procedure. As long as the weather conditions permit of the use of aerial reconnaissance, it will be very difficult for the enemy to surprise the advanced guard during daylight.

* If the protective cavalry is not under the permanent orders of the advanced guard commander, it seems most desirable that it should at least be so temporarily, when it falls back behind the infantry screen for shelter and rest. The allotment of billets to it, its protection, its action in a sudden emergency, and its co-operation with the advanced guard in case of attack, at any rate till orders can be issued by the leader of the whole force, all would appear to necessitate this. The same applies to the independent cavalry, when it is forced to seek refuge with the advanced guard at rest. The necessary mounted duties with the protective system at rest will frequently exceed the powers of the divisional mounted troops, and the commander of the advanced guard should be in a position to order the protective cavalry to assist him.

The artillery will normally remain with the general reserve of the advanced guard, so that it can be used according to circumstances in any direction. Here it will be well protected, and generally able to obtain shelter. Exceptional conditions may make it advisable to attach some guns to a section reserve. A thorough artillery reconnaissance of the whole protective area and

its foreground, and the opening up of lines for rapid access to alternative artillery positions will lead to more value being obtained from this arm than can be expected from a premature and arbitrary allotment.

The leader of the whole force will generally not remain with the advanced guard at rest. The line of action of its commander, in case of attack, is by no means so hard to lay down beforehand, as when in movement. The ground on which the advanced guard must fight to gain time is determined, and its features are known. If the protective system is attacked, the preliminary action must necessarily be defensive. If the enemy endeavours to pass the advanced guard, in order to attack the main body, offensive action against his flank is clearly indicated. The situation is only developed half as quickly as when both sides are approaching each other. Technical means of intercommunication are far more certain at rest. The leader has many things to settle about the whole force, and the head-quarter staff should be together, comfortably and centrally situated, so as to perform their work quickly and efficiently.

Most regulations introduce an officer who is called the "Commander of the Outposts," but it is most difficult to justify his existence in any well-regulated system of protection at rest. As long as the unity of the advanced guard is maintained, its commander will not only command its general

reserve, but also the detachments made by it. Each section commander will be directly under the commander of the advanced guard. To place a separate and intermediate commander over the section commanders is superfluous and even dangerous. He constitutes a totally unnecessary link in the chain of command. When several units are working side by side in battle, we do not have a separate commander for the whole firing line. Command, to be efficient, must be organised in depth. Even if the unity of the advanced guard is destroyed, and the protection at rest consists of a cordon system, stretching thinly all along the front of the main body, the section garrisons will emanate from different units of the main body. Each unit, such as a brigade, in the front line will provide for its own protection, and it is opposed to all sound doctrine to take such protective body out of the hands of the unit commander, by placing it, with similar bodies from similar units, under a separate commander. The great length and want of depth of such a protective system would alone render a single commander perfectly helpless.

Chapter XIII.

OUTPOSTS (CONTINUED).

THE enemy's dispositions may be such as to cause anxiety in two or even more directions, and the main body may require protective guards in addition to its advanced guard. These will receive attention later, but it is necessary to touch on the matter here, as they may considerably influence the dispositions of protection at rest.

They may be purely strategical bodies, with a mission to prevent some second hostile force from taking part in the battle, which we desire to fight with the enemy, against whom our main body is marching, or who is marching against us, or again they may have to protect our line of communications from hostile attack. In such cases they will probably be at a considerable distance from the main body, and they will directly influence our protective dispositions at rest only in a very minor degree. On the other hand, they may be plainly tactical in nature, and close to the main body; they may be directed against important hostile detachments, which threaten to harass our main body from some direction other than that of the

principal objective ; for example, the enemy's independent cavalry may be on our flank. We may also discover that the enemy's principal dispositions threaten our main body in more than one direction, or we may be in doubt as to where the enemy really is. Any such additional protective guard would, at rest, assume a disposition similar to that of the advanced guard, but pointing in the particular direction in which lies the danger for which it has been constituted.

The existence of one or more such protective systems, in addition to that of the advanced guard, will naturally decrease the amount of local protection, which the portion of the main body behind them has to employ to guard itself from hostile insults. If any two of the protective systems are in contact with each other, the zone of safety behind them is much increased. Even when there is a considerable interval between them, they can be connected by quite a thin screen of mounted picquets and patrols, which will keep out small hostile reconnoitring parties, or make their work very difficult and dangerous. Larger hostile parties will certainly be very loath to enter such a trap as the area between two protective systems.

The greater the front covered by the main body at rest, the more the protective dispositions of the advanced guard, which are necessarily limited in extent, if its unity is to be maintained, fail to give the essential local security to certain parts of it.

The situation is the same as that of a force advancing in several columns, and we must treat it in a similar manner. The advanced guard must retain its unity, and becomes the general advanced guard for the force as a whole, and the columns, not directly covered by it, must have their own local guards to protect them individually. When a force, marching by a single road, has to assume a broader formation, with several of its units abreast,* these units, as soon as they diverge from the main road, have to provide guards for their own immediate protection. When the units come to rest, the duties of these local guards in no way cease; they have merely to adopt the more thorough protective dispositions, which the state of rest allows.

The whole principle of the general advanced guard, as already explained, comes into play, but, of course, on a small scale.

If we suppress the main advanced guard, and make each unit, such as a brigade, supply its own protection at rest, we have a mere cordon system, corresponding to that of a line of tactical advanced guards. The protection is only local, and the force, as a whole, is unable to lay aside its necessary unreadiness. Such a system is necessary where there is no room for the main advanced guard, but we avoid it as long as possible. If we endeavour to spread out the main advanced guard,

* The German "Entfaltung."

so as to cover effectually the whole front, the result is worse, for we not only destroy the true unity of the advanced guard, and produce a cordon system of protection, but we also introduce confusion into organization directly action becomes necessary.

Each local protective system is pointed in the direction which is most dangerous to the unit which it guards. The smaller the unit, the less the distance of its guards, so these protective dispositions of units of the main body, at rest, will be much closer to the perimeter of the area occupied than the system of the advanced guard, or other protective guard, of the whole force.

The protective system of the main advanced guard of the whole force blocks the most important and dangerous approach or approaches, and indirectly defends the others by its threat of attacking, in flank and rear, any hostile bodies using them. If the hostile force, or a very material portion of it, endeavours to pass it by, so as to get at the main body it is protecting, its course of action is clearly indicated, and it throws itself on the enemy. But as the strength of the hostile body, which avoids it, decreases and the distance between them increases, its conduct becomes more doubtful and difficult. Such a hostile body may constitute a mere feint to entice the advanced guard away from its position, so that the enemy's main force may move direct on our main body,

without having to overcome the advanced guard, or with the probability of only meeting a lessened opposition from it. Hence it is that the advanced guard's threat of such action is generally only carried into effect against serious hostile movements.

The same idea applies to any other main protective guard which may exist.

The attack which is to be feared, on the local protection of individual units of the main body, is therefore one that is relatively limited in strength, though it may be quite serious in itself. Again, the units of the main body are further from the enemy than the main advanced guard, so surprise and hostile reconnaissance are rendered more difficult. Hence local protective systems of units of the main body need not be so solidly constituted as in the case of the main advanced guard, or other protective guard, of the whole force. Their dispositions can tend more to what is best for preventing hostile reconnaissance, and the disturbance of rest, than to what is best for a stubborn resistance ; an equal protective force can have a greater front and not so much depth, and, in fact, be more in the nature of a cordon system with respect to the unit it protects.

The leader may issue detailed orders as regards the local protection of the exposed portions of the main body, if he considers it of sufficient importance, or he can leave the matter in the hands of subordinate commanders.

From the network of roads, the general features of the country, the distance of their units from the enemy, and the position and extent of the main protective guards established by higher authority, the commanders of units, within the area occupied by the main body, must judge how much their local protection at rest should be developed. In one place a commander may find that his brigade is in an exposed position, comparatively close to the enemy, uncovered directly by the system of the main protective guards and very liable to hostile reconnaissance from neighbouring high ground. He may be forced to use a whole battalion for the protection of his brigade, and to push its protective system well forward, possibly a couple of miles. In another place the conditions may be just the reverse, and the brigade commander may be content to order a very thin disposition by a single unit, or he may make protection a more local matter still, and leave it to smaller units on the outer edge of his area to make their own arrangements for their immediate security. Thus the local protection of the main body may vary in different sections, from a solidly established system with considerable depth, to a thin fringe of picquets, groups or patrols by night, or a few observation posts by day.

Even when the main body has practically no width, and is billeted, along the road by which it is marching, in great depth, a certain amount of

local protection is always necessary and this, as a rule, will decrease from front to rear.

It is generally necessary to make arrangements for the local protection of the larger bodies of a protective system at rest. The general reserve of the advanced guard is usually a mixed body of some strength, possibly covering a considerable area, and the protection afforded to it by the fan-like disposition in advance is by no means complete. It is liable to be disturbed and reconnoitred by hostile detachments, which pass round the flanks of the system. If the protective cavalry seeks shelter with the advanced guard, it will also be necessary for it to make local protective arrangements. The section reserves will often have to place a picquet or group on their exposed flank.

When the leader of the whole force issues orders for any local protection, there will be little difficulty about the different sections fitting on to each other, but when subordinate commanders make their own arrangements, they must communicate with each other, so that there may be no mistake in this matter. It is most inadvisable to place the local protective bodies of several units under a single commander.

At first sight it would appear that a system of protection at rest, which includes the retention of the unity of the advanced guard, and any other main protective guard, combined with the local

protection of the main body, would entail excessive exertions, and too great a sacrifice of convenience and rest by far too large a proportion of the entire force, and is therefore not justifiable. But this is not really the case. With a moderate amount of care, there is no reason why the general reserve of the advanced guard, or other protective guard, should not enjoy, in the great majority of cases, just as much convenience and rest as the units composing the main body. It will but rarely have to take action, while the main body can continue at rest. Even section reserves will not usually be exposed to excessive exertions or inconvenience. It is rarely only the smaller bodies, especially the picquets, that will have to suffer, and it is probable that, in a cordon system of protection, there would be just as many of them.

The fully developed system of protection at rest is applicable to a condition of affairs, when it is possible for the enemy, on account of his proximity, to take advantage of our necessary unreadiness. When both sides wish for an immediate battle, it is necessarily a very transitory state of affairs, but, when one side tries to avoid a decision, it may endure for a considerable time, being renewed after each march.

If it is necessary to continue the march, after a halt when such a system has been used, in the same direction and by a single road, such as might be the case if the enemy has fallen back, there are

two ways of doing it. The first is to form a new advanced guard from the main body, and to keep the old advanced guard in position till the new one has passed through it, and assumed its march dispositions, or the protective cavalry has been able to form a first line of protection, making the original advanced guard then close and join the main body as it passes. This provides a relief for the old advanced guard, but makes the march of the new one considerably longer. It delays the whole force by the time taken for the new advanced guard to gain its distance, and this may be a most serious matter in the case of a lengthy column required to perform a long march, when every hour of daylight is a matter of the utmost importance. It also has the disadvantage of a change of duties at what may be a critical time. Such a course may be advisable with very small forces, or when the advanced guard has been exhausted by being strung out into a wide cordon system of protection at rest. The second way is to retain the same advanced guard, but to start off its general reserve first, the garrisons of the different sections of the protective system at rest closing under the protection of the cavalry and the van guard. Unless the relief of the advanced guard is essential, this method is undoubtedly the better and quite practicable, when the unity of the advanced guard has been retained.

If the advance is made in several small columns,

covered by a general advanced guard, the advantages equally lie on the side of preserving the original advanced guard.

If a new direction is assumed, a new advanced guard will nearly always be necessary.

The full development of the protective system at rest is only assumed when there is a necessity for it. When the enemy's main forces are still so far distant, that serious danger of attack from them is out of the question, much simpler measures may be adopted. The protective cavalry, even at night, may be able to retain its position in front of the advanced guard. Its protective dispositions at rest, which will be described later, block the main lines of approach. Though the resisting powers of mounted troops are inferior to those of infantry, their distance in advance compensates largely for this. Timely information of the enemy in itself constitutes security. The convenience and rest of the forces is the chief consideration. The advanced guard can dispense with its solid, fanlike system, and be content with a much slighter and more local form of protection at rest. The main body, which will remain echeloned at rest, in great depth, along the road, may be satisfied with still more local measures. There may, of course, be special circumstances, which will necessitate more care in certain parts of the force. The enemy's independent cavalry may be close, and successful in its operations against our cavalry,

there may be some other opposing detachment, or the inhabitants of the country may be hostile. The possibility of moving considerable detachments very long distances, in a very short time, by mechanical transport, must also be taken into account.

The action of the advanced guard, as a manœuvring body, commencing from a state of rest, is identical in its main features with what it can do, starting from a state of movement. It has to secure the time and space for the main body to lay aside its "necessary unreadiness," in the full sense of that expression, as already explained in Chapter ii. Time and space at rest are, however, more determined as they refer to a given area, while in movement it is difficult to foresee the exact place where contact will take place. Hence it is more possible to conceive a plan of action, beforehand, in case the enemy attacks.

The leader of the whole force has the same courses open to him as regards the main body, namely :—

1. Avoidance of battle.
2. Attack.
3. Defence.

To facilitate these operations, the advanced guard may be used defensively or offensively, principally the former, but the latter when it is desired to compel hostile attention to itself. It has two main lines of action open to it, namely :—

1. To fight where it stands.
2. To carry out a fighting retirement, for which it must avoid getting "fixed."

There are certain peculiarities about the influence of the state of rest on its action, on which it is necessary to dwell.

The dispositions of the advanced guard at rest are defensive in nature, and are not suitable for immediate movement as a whole. With a fully developed system its power of at once adopting the offensive is limited to about half its strength, namely, to the general reserve. With a small advanced guard, such as a brigade, the state of readiness of the general reserve at rest will be less than that of the main guard in movement. The protective cavalry, even if driven back on the advanced guard, in movement, may be ready for instant action, but this is not the case when it is resting behind the dispositions of the advanced guard during a halt. Hence possible offensive action is probably more delayed and weaker to begin with than when in movement. The more thorough knowledge of the ground will in some measure compensate for this. On the other hand, the position is more deliberately selected, and the possible lines of retirement more studied, making the defensive action stronger.

Night operations hardly enter at all into a consideration of the subject of protection in movement. It is quite possible that an advanced guard may

be called on to seize some hostile position at night, or it may be attacked during darkness, while in movement. It is, however, in this case, a matter which is in no way peculiar to a protective body. On the other hand, the defensive in night operations is an essential portion of the duties of a protective system at rest, and is one of the ruling factors as regards the dispositions.

It is usual in books of regulations to lay down a certain "line of resistance" for the protective dispositions at rest. In some countries it is the line of picquets, in others the line of outpost companies. Before adopting any such "line of resistance," it is most necessary to take into consideration what the main body is going to do, and consequently what must be the action of the advanced guard.

If the main body's action allows of the advanced guard's fighting where it stands, then, to order a line of resistance, may be justifiable. But if a fighting retirement is necessary for the advanced guard, as it will probably be in just as many cases, then, to order one, is an absolute evil. Its result must nearly certainly be that the advanced guard will get "fixed," on that line, and its fighting retirement become impossible. Either the advanced guard will be sacrificed, or the plan of the leader totally disarranged. The conditions of the attack on the advanced guard cannot be foreseen with any certainty, and the manner in which its combat

should be conducted, so as to gain the maximum of time without getting "fixed," must be left to its commander, and frequently cannot be predetermined even by him. If the necessary time cannot be gained without getting "fixed," then it is a sign that there has been an error in settling the strength and position of the advanced guard.

As far as regards local protection, or the case where protection is limited to a cordon system, the time which can be gained by a fighting retirement is almost negligible, and the protective bodies performing this duty, if attacked in force, have no alternative but to fight where they stand, and a line of resistance is generally essential. There is little question, in such a case, of the main body's being able to manœuvre as a whole. With a cordon system its general line of action must be defensive, time is not available to avoid the battle or to adopt the offensive. The line of resistance of the protective system must correspond with the line on which the main body will resist. The former cannot be in front of the latter, as there would then be two lines of defence, the front one so weak that its eventual defeat would be inevitable, and it would be then driven back on the main body's position with most demoralising results.

If a "line of resistance" for a system of protection at rest is justifiable, the question remains of where it should be. A protective system is fan-

like in shape, so that the falling-back of the more advanced and smaller bodies tends to the concentration of the garrison of a section, but the reinforcement of the bodies in front by the larger bodies in rear tends to its dispersion. The whole length of the picquet line is much greater than that of the outpost company line, probably about double. An attack by day, if of a serious nature, will extend over a considerable front. The situation will develop very quickly, and the commander of a detachment, in the outpost company line, will have little time for making up his mind whether to support one or other of his picquets. He will probably support the first one to be attacked, only to find that a few minutes later a still more serious attack is developed against the other. The defence of the outpost companies, when distributed along the picquet line, must be very weak, and there will be many serious gaps. Before the rear echelons arrive in the firing line, the enemy's attack will have already made considerable progress. The management of the section reserve will be very difficult. Its weakness will very likely restrain the commander from adopting the counter-offensive with it, though this might be the best course. It will always be difficult for him to know when to launch it, as the situation will be constantly changing. By the time it has reached the picquet line, the direction for counter-attack originally selected, may be quite unsuitable.

It will probably end in his merely joining the firing line. The defence of such a long thin line, probably some two miles to a single battalion, will not last very long, probably not long enough to allow of the counter-offensive of the general reserve making itself felt.

There can be no doubt that a more concentrated defence of the outpost company line is more likely to be successful, but even here we are faced with much the same difficulty as before, but in a less degree.

Under such circumstances, it is very likely that the falling back before the hostile attack will be continued up to the line of section reserves. The delay gained will, by this time, have developed the situation to some extent, and the resistance of the protective garrisons of sections, on a front more suitable to their strength, will render the frontal attack on them very difficult. Recourse to envelopment will be generally necessary, which will require time, and will afford the general reserve of the advanced guard, or other protective body, a favourable opportunity for the use of the offensive.

At night, it is almost hopeless to expect that such a weak body as a picquet will be able to resist long against a concentrated hostile effort. If the picquet line is made the line of resistance, it will almost inevitably be penetrated by the first rush of any serious attack, unless the position is of ex-

traordinary strength, and force can be concentrated at a few points. The difficulties of the rear echelons, in endeavouring to come up to the assistance of the picquet line, will be greatly accentuated. In order to defeat a night attack, we require to increase its disorganisation continually by the depth of resisting disposition. The *élan* and cohesion of a body attacking at night are very difficult to maintain. The attack on the picquets will disturb them, that on the larger bodies on the outpost company line, even though successful, will probably destroy them. It will even be difficult to keep intact the outpost company line, but the line of section reserves is far more promising, and there seems in this case to be a very favourable opportunity of using the general protective guard, even during darkness, offensively against a very disorganised enemy. A night attack has in most cases a limited object, and is not carried out by very large bodies. Its management on a big scale is so difficult and uncertain, that it cannot, when considerable forces are opposed to each other, constitute the main battle, but will be used to gain some point or position which will be of advantage in the main battle.

In the case of a cordon system there is no separate general protective reserve; this duty must be performed by the main body, or a portion of it. The falling back of the front lines in each section leads to the concentration of each section garrison,

but not necessarily to that of the whole protective system, which may contain several sections. With a cordon system, when the enemy attacks, the main body has no power of manœuvre. It must fight practically in the order in which it is resting. The defensive is a necessary initial state of a force which is attacked by a more ready enemy. An advanced guard, as it were, absorbs this defensive necessity, leaving the main body freedom to proceed at once to the offensive or other course of action if preferred. When there is only a cordon system of protection, this necessity of initial defence is communicated to the main body. If the picquet line is selected as that of resistance, its defence by the protective forces is necessarily very weak, and it cannot hold out long. The main body behind it has to hasten to its assistance. Even if it arrives before the defence has totally collapsed, the position of affairs is likely to be very serious. The enemy will have worked up close to the line of resistance; the main body will be used up as it arrives to strengthen the defence or to make local counter-attacks; its entry into action will be particularly difficult owing to the proximity of the enemy. The defence of the main body thus begun is hardly likely to be well conducted or successful. If the main body selects a line of defence in rear of the picquet line, there will be two lines of defence, till the protective force is driven back in confusion on to the main body.

Hence if the protective forces are allowed to get "fixed" on any defensive line, that line must be the line of defence of the main body. If the outpost company line is chosen as the line of resistance, the main body has a little more time to get ready, and a little less distance to go, and it will commence its battle under slightly more favourable conditions. The further back the line of resistance, the better for the main body, but with a cordon system there is so little space that we cannot go back without getting involved with the main body itself.

The conditions as regards local protection at rest are very similar, but here we are dealing with a second safeguard, provided against local and limited hostile attacks. There is no reason why the whole main body should be paralysed into the defensive, because a local protective section is attacked. If the development of local protection at any point is considerable, the same class of objection applies to the picquet line being the line of resistance, namely, that it will be difficult for assistance to reach it before it is broken. The outpost company line will generally be able to hold out long enough against such attacks as may be expected. When the development of local protection is slight, it may be necessary, for want of depth, to adopt the picquet line as that of resistance.

We may fairly assume, therefore, that, generally

speaking, it is better to make the line of resistance on the outpost company line than on that of the picquets, and that if the distance of the protective system from the main body allows of it, a line still further back is to be preferred.

In very close connection with this matter of the protective line of resistance, stands the question of the entrenching of the protective bodies at rest, Field fortification has a very marked tendency to render troops immobile. The soldier, who has a good trench to protect him, does not like to leave it for action in the open. Conditions exist where there is a distinct advantage for the soldier to hold on to his position as long as possible, and then entrenchments are most valuable. But there are also conditions, especially in protective work, where this defence to the bitter end is not necessary or even desirable. Entrenchments "fix" the troops occupying them, so, when we require a detachment to gain time while gradually falling back, we should not employ them.

Each protective detachment should be a mobile body within its own section or sub-section. It does not wait in a fixed position till taken at a disadvantage by the enemy, but it moves to gain advantage over him. From this point of view the entrenching of detachments not on the line of resistance (if one is necessary), is detrimental, and the strengthening of that line should be carried out in such a manner as to ensure its stubborn de-

fence as a whole, and not only that of the detachments which originally occupy it.

If the gaining of the maximum of time at a particular point is of paramount importance, and it can only be secured by sacrificing a detachment, then that detachment may be entrenched as strongly as possible. Such a deliberate sacrifice can only very rarely be justified. For example, we cannot make it a rule, that picquets, when the line of resistance is further back and they cannot be reinforced, must, at night, hold out to the bitter end.* Even at night a protective detachment should be mobile. The enemy may have to use roads for his general advance, but, when he approaches the detachments, he will certainly get off the roads if he can. A good commander, with steady men under him, will be able to delay and disorganise a night attack very considerably, and yet be able to reach the next line without overwhelming losses, and it is one of his principal duties to study how this is to be done. It may be stated with some certainty that, in ordinary cases, to render his command immobile by entrenching it, is about the worst method he can adopt.

Both for day and night defence the work of detachments, which have to delay and retire, should be directed to clearing the field of fire, opening up and marking communications, constructing obstacles and taking ranges.

* For an exception to this rule see Chapter xix.

But the greatest safety and strength will be gained by concealment from the enemy, including his flying machines. The necessity for concealment should in nearly every case be regarded as the paramount consideration. If entrenching, or any other work, would give away the position, then it may be regarded as an evil and should not be undertaken.

As has been shown in Chapter ii, the principal factor in the necessary unreadiness of a force consists in the time required to execute the manœuvre of the main body, as a whole, in order to regain the initiative. This is secured by the general advanced guard, which must have strength and space enough for the purpose. If a battle is desired by both sides, the manœuvre of the main body, combined with the action of the enemy, will result in the main forces approaching each other. The manœuvre having been completed, the protective task of the general advanced guard is accomplished, and its rôle as a protective body ceases. It may now be regarded merely as one of the units of the main body, which has become engaged earlier than the rest. The amount of protection required for the main body is now evidently something much less than before, because the time required for its manœuvre as a whole can be eliminated.

There remains, however, the time required for each column to deploy* from the march formation

* The German "Entfaltung."

into one leading up to the extension into actual dispositions for battle, and this is the principal factor in the column's necessary unreadiness. It is secured by the tactical or local advanced guard, which must have strength and space enough for the purpose. Once this preparatory deployment is over, the protective task of the tactical advanced guard is accomplished, and its rôle as a protective force ceases. The amount of protection required for the column is now plainly something less than before, as the time necessary for this deployment of the column can be eliminated.

The time required for each part of the column to pass from its preparatory formation to its full battle disposition is secured by a still more local protection, which in turn disappears when the full battle disposition is ready. We thus reach a stage of theoretically perfect readiness, when no outside protection is necessary.

But as the necessity of protection, in the ordinary sense, thus gradually decreases, another form of protection is being developed in the main body, for battle formations, whether offensive or defensive, are in themselves a highly efficient form of protection. From the company to the army, each unit in front has its own reserve. These reserves are echeloned in depth. The companies in the firing line protect the battalion reserves, the advanced battalions the brigade reserves, the advanced brigades the divisional reserves, and so on.

As the battle progresses, there is a gradual merging of these reserves into the firing line, commencing with the smallest, and consequently an increasing reduction in depth, but till the crisis is reached, the protective disposition does not disappear altogether.

The power of a more limited, or secondary, form of manœuvre, is thus secured by the battle dispositions. The reserves in rear of the actual fighting line can be manœuvred, the extent depending on an appreciation of the strength which must be kept close at hand to maintain the fight in front. For example, if two brigades of a division are sufficient for this purpose, the divisional reserve, consisting of the third brigade, is disposable for manœuvre. This power of manœuvre is not altogether lost till the last reserve is launched into action.

There can be no pretence that a battle can be divided into separate phases with well defined limits such as those given above. It is often difficult to say where one ends and another begins. The description, however, of the general lines on which a battle develops is sufficiently accurate for our purpose. We see that, as the interval between the hostile forces decreases, the strength of the protective system will decrease with it, for the more a unit has been able to lay aside its necessary unreadiness, the less protection it will require. To use an unnecessarily strong protective system,

when there is no room for its action, and therefore no possibility of its effecting the object for which its strength exists, is actually harmful. When the delay required is small and can be gained by using less strength, the superfluous power is apt to lead to action which is contrary to the intention of the commander of the force protected, and therefore embarrassing. For example, the commander may consider it expedient that a unit or units should await attack in a certain position, which is doubtless chosen on account of its suitability for defence, and is, therefore, the best in the immediate neighbourhood. The readiness of the defence may be high, requiring only a slight delay from its protection, such as can be procured by a warning of hostile approach, and a rapid retirement of the observing bodies on to the position. A strong protective disposition would only be an incentive to its commander to hold on too long to some intermediate position, and so get "fixed." In this case either the troops guarded must abandon their position, and advance to the assistance of the protective bodies, thus having to defend an inferior and unprepared position, or they must be content to look on while the protective bodies are overwhelmed, and finally driven back in confusion on to the proper position, masking its fire as they do so. Two lines of defence used simultaneously are always bad.

Modern improvements in warlike weapons, to

judge from the latest wars, have had a marked tendency to increase the time which is spent in the gaining-of-contact phase, and the duration of the battle. A big battle may last for many days. The moral and physical strain will inevitably lead to periods of rest for the troops. It may be urged that the exhausted foremost lines can be replaced by fresh troops, which have been previously rested, these again when worn out being replaced by others, so that the action may never flag. No doubt such a scheme will be followed to some extent, but the moral and physical endurance of commanders must be taken into account, as well as their natural disinclination to hand over the conduct of affairs, for which they alone are responsible, to anyone else, even for a limited period. Periods of rest will take place almost inevitably in all but the smallest engagements, and they may occur at any time, from the first gaining of contact to the crisis of the battle ; there may be many miles between the combatants, or only a few yards.

When the rival forces are close to each other, periods of rest will generally commence by a cessation in the offensive, ensuing upon a sort of mutual consent, which, however, is absent as regards the recommencement of the struggle. It is the uncertainty of who will first begin again which makes protection necessary for both sides. Modern improvements in firearms have greatly increased the probability of action during the hours

of darkness, so that it is very hard to say when periods of rest are likely to occur. In great battles they will happen at different times in different portions of the field. Wherever and whenever they do occur, we must be prepared with our protective arrangements.

The distinguishing feature of units in battle should undoubtedly be their readiness, and the amount they can lay aside is certainly small, but even in battle there are degrees of readiness, especially when the numbers engaged are large. We may have a unit which has assembled at some point after deployment from column of route, and is still a good many miles from the enemy. The great factors in necessary unreadiness, namely, its manœuvre and deployment, are over and may be eliminated from the delay required ; its general task has been allotted, but the details await decision ; its final battle dispositions have not been adopted, possibly for want of the necessary data ; the urgency of concealment, especially from aerial reconnaissance, may require the occupation of a temporary position not well suited for action ; its component parts have not yet received definite missions, so that orders must be prepared and issued. These points constitute a certain amount of unreadiness, which is tactically unavoidable. Again, it is a grave error, even in battle, to harass soldiers by keeping them in an unnecessary state of readiness. Even small concessions to their

convenience and comfort are of the greatest importance, especially when battles may last for many days. As long as possible we must allow facilities for the issue of water and supplies, for sleep, for cooking, and for the use of such shelter as may exist, particularly in bad weather. These must entail a certain amount of relaxation of readiness, which is quite permissible when the enemy is still at some distance.

The sum of all such unreadiness is certainly not very large, but still a protective system is necessary to ensure the delay required. As pointed out by General Haurion,* there is no place in such a system for reserves, either general or sectional, for it is not called on to carry out a prolonged struggle. Outpost companies, with their picquets, occupying the main lines of approach, and pushed well forward, are quite sufficient. Their duty is to give warning of the enemy's approach. By their fire they can force an initial deployment of the hostile advanced troops, and, having done this, they should retire right back to the unit they are protecting, without renewing the fight. At night their resistance will be sufficient to disturb the enemy's dispositions seriously. Weak detachments, well posted and hidden, so that their strength cannot be easily calculated, are sufficient for the task. Their retreat should always be easy, as the enemy's ignorance of their strength will

* *Manœuvres de 1889*, pp. 361, 368, and 375.

oblige him to bring into action considerable numbers in order to drive them back. They should not constitute a homogeneous line of defence, or be too much dependent on each other, and the retreat of one should not necessarily entail the retreat of the rest. They should not constitute a regular system of resistance, but should be, as it were, the "antennæ" of the position. Such a system should never give rise to a serious struggle in advance of the position to be protected.

Even if a force is acting on the whole offensively in battle, when it rests, its attitude must be temporarily defensive. If the commander desires to assume the offensive directly he knows of the enemy's approach, and there is time to do so before the arrival of the enemy opposite the position, the existence of protective troops, in front, closely engaged, would probably do more harm than good.

As the battle progresses, the unreadiness, which is tactically unavoidable to begin with, gradually disappears, commencing with the units which are engaged in the front line, and the possibility of relaxing readiness for the comfort of the soldier gets less and less.

The external protective system will become weaker, and will be drawn in closer to the body secured, till a stage is finally reached when sentries keep watch over the firing line. Protection has then passed to the battle dispositions themselves, and the firing line has become the line of observa-

tion as well as of resistance, protecting any echelons which still remain behind it.

It is always possible that a unit* acting offensively or defensively on a flank may need to retain a power of manœuvre up to a later period than the rest of the army, and that the conditions may permit of this. In such a case its protective dispositions must be of a more solid nature than those employed by the other units.

The protection at rest of an army, moving by several roads and having a general advanced guard, is very similar to that of a single independent column, the main body of which has adopted a considerable front on coming to rest. The general advanced guard, by securing itself, protects the main body to a great extent, while still retaining its unity for action. Whether moving on one or more roads, the general advanced guard will adopt dispositions similar to those of an independent column, but being a much isolated body, exposed to attack by superior numbers, its protective arrangements must be strongly constituted. These will consist of the protective systems of the van guards and any other protective guards, supplemented by the local protection of the main body of the general advanced guard.

As regards the immediate protection at rest of the main body of the army, the local or tactical

* This includes cavalry units, such as the independent and protective cavalries.

advanced guards of columns, not directly covered by the general advanced guard, must protect those columns, as in the case of a single independent column. The development of each such protective system depends on the amount of danger to which the column is exposed. As a rule the very existence of the general advanced guard implies that there is a very considerable distance between the main body and the enemy's principal forces. This distance will often allow of the protective cavalry remaining out in front of the tactical advanced guards, though not in front of the general advanced guard. Hence it is quite possible that only a slight development of the protective systems of the tactical advanced guards may be all that is necessary.

Each column will also have its purely local protection which, however, will usually be much less extensive than in the case of a single independent column. If care is taken to connect* the protective screens of columns along the front, it will be so difficult and dangerous for the enemy's reconnoitring parties to penetrate between the columns, that local protection can be confined to the outer flanks of the outer columns, and to the front of the columns where the protection of the tactical advanced guards is insufficient.

If a large force, moving in several columns, has

* When the distance is excessive for infantry, small cavalry detachments should be used to close such gaps.

no general advanced guard, the local or tactical advanced guards must assume a more fully developed system of protection at rest. The general line of protection, and the portion for which each column is responsible, will be fixed by army headquarters, usually in march tables, and these may refer to several days. It will greatly diminish the local protective work of the main bodies of the columns, if the several advanced guards are able to join up their protective systems in a substantial manner, but this will not be possible in many cases, as the distances between columns will be too great. For example, if they are ten miles apart, it is out of the question to attempt to spread the advanced guard over this front. Such a cordon system would have no resisting strength, and the extra exertions which the outlying units would be called on to perform would be too great, for the advanced guard cannot be relieved daily. It is inexpedient to stretch out the advanced guard to an abnormal extent. Any gaps which may exist should be filled up with a thin cavalry screen to prevent the ingress of small hostile reconnoitring patrols, and to give warning of that of larger bodies. In the British organisation there is undoubtedly a considerable difficulty about this. The divisional mounted troops are generally overworked already, and will not have enough men available for such a task. The protective cavalry forms a separate organisation for the whole army, and column

commanders will have great difficulty in getting hold of a squadron or so, even for such important work. The consequence is that gaps will often be unavoidable.

The protective cavalry organisation undoubtedly complicates the protective work of the several columns. Its commander can practically do what he likes, irrespective of the requirements of the individual columns, and it is very difficult for the commanders of tactical advanced guards to know to what extent they are really secured by the protective cavalry, and, as we have seen, their dispositions greatly depend on such knowledge. Serious complications, too, may occur as regards command, etc., when the whole or a portion of the protective cavalry falls back under the shelter of the advanced guards of columns.

The distance of an advanced guard must be at least sufficient to allow of its own column laying aside its necessary unreadiness, within the area allotted to it, but, being supported by other advanced guards on one or both flanks, it has greater powers of resistance and can, without danger, be pushed somewhat further forward than in the case of an independent column, but any endeavour to obtain freedom of action for the whole army by increasing the distance of the general line of tactical advanced guards is a most dangerous expedient. It must be clearly understood that each advanced guard is directly under the column com-

mander, and there should be no attempt to form several advanced guards into a separate command.

In war the relief of any body, performing an important task, is in itself a disadvantage, as it must take the fresh body some time to become acquainted with its new duties, and it is to be particularly avoided at any critical time. Hence detachments should only be relieved when it is really necessary to do so, in order to give them a chance of recovering from the extra exertions which they have had to use.

Although an advanced guard retains its rôle as such, whether the main body is in movement or at rest, it is by no means necessary that it should, as a whole, have to suffer greater hardships than the main body. In movement, the hard work is done by the cavalry, and the rest of the advanced guard, unless it has to come into action, marches under rather more favourable conditions than the main body. At rest, the majority of the advanced guard will usually be able to get as good, if not better, shelter than the main body, and there is no reason why it should suffer any privation as regards access to baggage or food, especially since the introduction of motor transport. If dependent on the country for supplies, it is in a very favourable position. Unless seriously attacked, its work is not especially heavy. This applies to the general and section reserves, namely, over three-quarters of the whole advanced guard. The detachments' in the out-

post company line will often be unable to obtain shelter, their rest is liable to frequent disturbance, they have extra distances to march to get into position, and difficulty begins to show itself with respect to access to baggage, and the issue and preparation of food. All this is greatly intensified in the case of the picquets, the men of which, in addition, have to perform extremely heavy duties as sentries and patrols, thus allowing very little opportunity for rest. They are also exposed to a constant moral strain, on account of their isolated and dangerous position. Even in good weather, and when a march next day is not called for, the men of a picquet cannot be expected to perform such work for more than twenty-four hours, and if the weather conditions are bad, this may have to be reduced. As a rule the conditions in the outpost company line are not sufficiently favourable to allow of the picquets being relieved by their own units in that line, for the relaxation would not be sufficient. On the other hand, one relief can usually be supplied by the section reserve changing places with the outpost companies and their picquets. Similarly one relief of the detachments in front can be effected by the general reserve taking their place. If this rotation of duties does not give sufficient rest, then the whole advanced guard must be relieved.

This relief, if it takes place at the end of a march, will entail much extra exertion on the part of the

advanced guard, which must fall back several miles, as well as on that of the relieving unit, which has to march several miles further. If the reports from the front are quite favourable, it is possible to halt the advanced guard, at the place where it will finally rest, and allow the unit which is to take its place to pass it. This is dangerous, as it amounts to a suspension of the advanced guard for a considerable time. As already explained, the relief at the beginning of a march means the loss of valuable time to the whole force, and extra exertion to the relieving body. If the march is necessarily a short one, this is, however, undoubtedly a convenient opportunity. If the halt is prolonged, the relief can be carried out on the day after the arrival, or any subsequent day of rest.

With very large forces the relief of the general advanced guard will always be extremely difficult, and therefore it will seldom be carried out.

The relief of local protection will be effected on the same principles, but, from the smallness of the bodies and distances concerned, it should not present any difficulty.

As the relief of the more advanced detachments should be done in such a manner as not to give away the positions, it must usually take place at night, and just before dawn is a convenient time. It is, however, difficult to justify the theory that doubling the strength of the advanced detach-

ments, at a time when the enemy is likely to attack, is a great advantage. The strength gained in front will be lost further back, where it will be far more valuable, unless we are prepared to surrender our views as regards the innate viciousness of a cordon system. If the day and night positions of the advanced detachments are different, the new units can take up the former at once.

When in movement, in a hostile country, it is evidently impossible to prevent the ordinary inhabitants, and those dressed as such, from remaining in the area covered by the army, and even men in uniform can be hidden with ease. Nor is it possible, unless special measures are taken, which use up a great many troops, to prevent these people from getting away with information, as soon as the army has passed. This used to be comparatively unimportant, as it took so long for the information to reach the enemy's headquarters that it was generally not of very much value when it did arrive. Now-a-days a few hours' ride on a bicycle or even less on a motor bicycle, both very easy to hide, while the army is passing, will probably bring a spy to a friendly telegraph office, from which a message can be sent, or if there is no office, it will not take him long to reach his own force by safe, though roundabout, roads.

In order to stop this, it is necessary that the force, in advancing, should not only arrest all outward bound passengers on its own flanks but

should leave behind it a screen on either flank, blocking all exits from the area over which the mass of the army has passed. The question arises as to whether an effective "investment" of this area is possible and, if so, how it is to be carried out.

The ordinary local protection, which is employed to secure the flanks of a force in movement, both from insults and hostile reconnaissance from outside, is necessarily of a very scattered nature as, in order not to delay the march, it must usually consist of mounted troops, very few of which will be available. It cannot be depended on to stop all egress and, for this purpose, when it is desirable, a closer screen must be established. When the force is at rest, infantry can also be employed, and the ordinary screen of local protection is doubtless more efficient for the purpose, but little or nothing is gained by this, as egress would be possible till it actually got into its resting position. Hence, to be of much use, the efficient screen must be started from the head of the column.

If this double screen extends for one march to the rear, and the rear extremities are joined, the information the enemy can get will be at least twenty-four hours old. The front of the army being very great, it may be more economical to prolong the lateral screens and leave out the rear one. If it is necessary that the information, which reaches the enemy, should be still older, the lateral screens may have to be prolonged for two or three

days' march. Thus, to be of any good, the total length of the lateral screens alone must be at least thirty or forty miles. Small parties cannot be posted for any length of time, in a hostile country, without support fairly close to them, and it appears to be very doubtful whether in ordinary country a battalion could possibly undertake more than ten miles of screen. We would thus require at least a brigade for this work. With any force of moderate dimensions, it is evidently quite impossible to have a screen of this nature. We must be satisfied with such measures as are possible for the prevention of the collection of detailed information by secret agency. We must, however, fully recognise the fact that valuable information will be gained by the enemy with comparative facility, and that it requires no very elaborate organisation to ensure it.

With very large forces it may well be advisable to establish such a screen by means of the troops not intended for fighting, except on the lines of communication, such as second line organisations, which will, in European wars, immediately follow the regular armies. It may be urged against such a screen that, as aerial reconnaissance will remain possible, it is therefore useless to expend large numbers of troops on stopping a secondary source of information, such as secret agents, but it must be remembered that aerial reconnaissance, however efficient, has its natural limits, and it is just

in the points in which it is weak, that secret agency can most usefully supplement it, namely, in the details that can be gained by really close observation.

Such a screen can be formed in two ways :—

1. The special troops for the purpose can be placed at or near the heads of the main bodies of the flank columns, and the necessary detachments be halted in succession from the front at suitable centres from which they can form the screen to the flank. They will take up a certain amount of road space, but there is no reason why they should otherwise delay the columns. This is probably the best and most simple plan.

2. They can move in separate columns on the flanks, when roads are available, forming screens in a similar manner. This is more likely to involve them in serious encounters quite outside the purpose for which they are wanted, and to interfere with proper flanking detachments.

Chapter XIV.

CAVALRY PROTECTION.

FROM a theoretical point of view there seems no reason why the general principles of protection, which are applicable to mixed bodies, should not refer equally to a mounted force, which has to provide for its own security. Cavalry appears to require the same graduated system of protection, from the general advanced guard of a very large force, moving in several columns, to the small local patrol which guards the main body from minor "insults" and hostile observation. The necessary time and space for the main body to lay aside its necessary unreadiness must be secured by a suitable force, or guard, which forms a pivot of manœuvre, compels hostile attention and "fixes" the enemy. There are certain points, however, which are peculiar to cavalry, and these must be given their full weight in the practical application of theory.

Modern conditions of armament have undoubtedly rendered the dismounted action of cavalry far more important than it was formerly, but the campaigns, which have taken place since cavalry

has been universally armed with the rifle, have not been of a nature to afford very definite examples of the best practical methods of protection, where both sides possess powerful mounted forces. The best strategical and tactical methods of using large cavalry bodies, in a modern war, are in themselves, to a large extent, a matter of conjecture, and this includes the practical application of protection in which, on account of its initial defensive nature, dismounted action must play a prominent part. There is probably no military subject on which such extreme divergence of opinion exists as on that of the relative values of mounted and dismounted action, and it is perhaps on account of this uncertainty that most regulations have so little to say on the subject of cavalry protection.

Accepting the principle that cavalry should be used chiefly as a separate body in advance of an army, as "independent cavalry," there is perhaps no better doctrine, as regards the details of its employment, than that advocated by General von Bernhardi, in his admirable works. The balance which he established between mounted and dismounted action appears to be as near the truth as we are likely to get, until actual experience has been gained from future wars, where cavalry is freely employed on both sides.

The cavalry soldier is rightly expected to be efficient in both mounted and dismounted work, and it is only natural that his degree of efficiency

in the latter should be inferior to that of the infantry soldier, who is a specialist in it. Although this can never be altogether eradicated, the comparatively long service in the British army should enable us to make this inferiority less marked than in most foreign armies, in which training must necessarily be far shorter than in ours. To this training inferiority the disadvantage must be added of being encumbered with the charge of horses, and of not having an efficient weapon for use at close quarters. The very nomenclature of cavalry units gives an altogether fictitious idea of the numbers that can be used for dismounted action. After deducting men required for other urgent duties, it will seldom be possible for a division to furnish more than 1,500 rifles for dismounted action. These points all tend to increase the want of efficiency in this class of work, and will inevitably lead to disappointment, if not thoroughly realised beforehand. When cavalry is opposed to cavalry, both sides naturally suffer from the same disadvantage, but directly one side consists of infantry, or infantry forms part of it, the difficulties of the other side, composed only of mounted troops, become very great. Hence it is only natural that even considerable bodies of cavalry should be cautious in carrying out an attack dismounted against a position occupied by infantry, or by what may turn out to be infantry, and that they should fear an infantry attack on

them, when dismounted and forced to remain so in order to gain time. Even inferior organisations, such as the German Landsturm, will thus prove formidable opponents.

The great mobility of cavalry makes the time required for the manœuvre of the main body much less than in the case of a mixed force. It is probable that double the rapidity can be ensured without unduly fatiguing the horses. Roughly speaking, for similar numbers, a cavalry column occupies double the road space of a mixed force, so that the deployment will not be quicker unless the pace is greatly forced. The power of rapid concentration, however, enables cavalry to march in more columns than in the case of infantry.

As long as cavalry remains mounted, it has only one form of action open to it, namely the offensive. If it seeks to exploit temporarily the advantages of the defensive, it must employ dismounted action for the portion which defends. Except when holding a strong position, where the flanks are secure, its defence, even against cavalry, is weak, because the advantage of the initiative is even greater in combats between mounted forces than it is with infantry. The rapidity of action is greatly increased, and hostile out-flanking movements can be executed so quickly, that they may be completed before they become known to the defender. The enemy, too, has the power of developing great superiority against a protective

detachment far more rapidly than in the case of mixed forces. For similar reasons a fighting retirement, when opposed by a superior cavalry, will always be particularly difficult, and will not gain nearly as much time as in the case of a mixed force, unless the line of retreat is particularly favourable, and affords a series of strong positions, which cannot easily be turned.

This inferiority in defensive and delaying power of a cavalry protective guard makes it very hazardous to attach horse artillery to it, unless the conditions are favourable and the force is a very large one. The absence of artillery still further decreases the delay that can be gained.

It, however, undoubtedly possesses the advantage of being able to avoid a combat on unfavourable ground more easily than infantry, and to fall back on some favourable position between it and the main body, where it will have a chance of being able to resist more stubbornly, even against considerable superiority.

When the whole force is in movement, the advanced guard will, as far as possible, advance by "bonds successifs" from one such position to the next.

Cavalry Training 1907 lays down* that the advanced guard "should be beyond any defile at the moment the head of the main body reaches the entrance; thus the length of the defile will regu-

* Section 148. *

late generally the distance of the advanced guard from the main body." This is certainly essential, but it is also necessary that the advanced guard should not only be sufficiently beyond the defile, but should itself be in a favourable position, where it has a chance of securing the necessary delay, not only for the passage of the defile by the main body, but for its safe deployment and manœuvre beyond the defile. Another factor in selecting the position for the advanced guard is that it should ensure suitable ground for the artillery.

Unless ground is favourable for concealment, the deployment of the main body, when large, should take place nearly four miles from the enemy, for to be caught by artillery fire while so employed might prove very serious.* For this reason it appears necessary that the advanced guard should be at least three miles from the exit of the defile.

No doubt, the deployment may often take place in consequence of information of the enemy before he has got in contact with the advanced guard, but the manœuvre to be executed by the main body must usually be founded on information gained in consequence of his contact with that body. A zone of three miles will generally be by no means excessive for the manœuvre, as any

* Von Bernhardt, "Cavalry in War and Peace." (English Translation), p. 144: "Whoever is obliged to effect the deployment of his force under the enemy's guns casts from him one of the most important elements of success."

lateral displacement should certainly be performed out of range of the enemy's artillery fire.

Thus there seem to be good reasons for thinking that, in the case of a cavalry division, the minimum distance of the advanced guard should usually be about three miles. With several divisions, moving on parallel roads, the zone of manœuvre must be greater, probably twice as much. With smaller bodies than a division, the slight defensive power of the weak advanced guard will render a reduction necessary. The maximum distance, as already explained, depends on the features of the country, and the possibility of the advanced guard holding out till the arrival of the main body.

The advanced guard should make its rapid advance from one position to the next, at latest, when the main body is within its minimum distance. The advanced detachment should be able to report if it can probably succeed in this. If success is doubtful, the main body should halt till the advanced guard is established in the new position. If the task is beyond the power of the advanced guard, it must fall back on to the first position. "Cavalry must thus be continuously prepared to pave the way by dismounted action for the mounted combat."*

The advanced guard is, however, by no means precluded from adopting offensive methods, mount-

* Von Bernhardt, "Cavalry in War and Peace," (English Translation), p 108.

ed or dismounted. It is its duty to clear the road from minor opposition, and, as in the case of a mixed advanced guard, it must compel attention to itself by attacking or threatening to attack, if the enemy endeavours to pass it by, in order to engage the main body.

The detachments sent forward by the advanced guard for protective reconnaissance correspond to the "protective cavalry" with a mixed force. They will be distributed in the same manner and will adopt the same methods as laid down for that body in Chapter viii.

If the main body has detached any other protective guard, in addition to the advanced guard, it will act in the same manner as the advanced guard, in the direction in which it is employed.

Local protection must be employed on the same principles as those laid down in Chapter viii.

The general principles as regards the composition and command of the advanced guard and other protective guards with mixed forces, as laid down in Chapters viii and ix, are applicable in the case of cavalry. For example, the advanced guard should, whenever possible, consist of a unit and should vary from one-third to one-sixth of the whole force. Except with large forces, where the advanced guard is a brigade or more, it will seldom be advisable to attach artillery to it, on account of its weak defensive power, and the liability of the artillery being caught by hostile shrapnel while

still in movement. The mounted engineers should, as a rule, accompany the advanced guard. The protective detachments emanating from the advanced guard, but not the reconnoitring squadrons and their patrols, will be under the advanced guard commander.

Until contact has been established, the leader of the whole cavalry force should be at the head of the advanced guard. The rapidity with which a situation is developed makes this even more essential than in the case of mixed forces.

The reconnoitring squadrons and their reconnoitring patrols are the "independent cavalry" of the cavalry force. Though their object is the reconnaissance of the enemy's main army, they will usually be the first detachments to come in contact with the enemy's independent cavalry, and any other bodies with which their own cavalry will have to fight, however much they may try to avoid such contact. Much of the information which they send back will be of a protective nature, and most valuable to the cavalry leader, though he employs other means for obtaining such information.

Reconnoitring squadrons must protect themselves by patrols of a very local nature. The endeavour to use a far-reaching system of protective patrols will inevitably lead to confusion and unjustifiable dispersion of the squadrons.

As the reconnoitring squadrons are directly

under the cavalry leader, it seems better that they should be detailed from the main body of the cavalry than from the advanced guard or other protective guard, but as these latter detachments will generally be relieved independently of the reconnoitring squadrons, it seems impossible to avoid the reconnoitring squadrons sometimes belonging to the units performing protective duties. In detailing a new protective guard the number of detached squadrons must be borne in mind, or the guard may be too weak to carry out its duties.

If detachments of other arms, such as rapidly transported infantry or cyclists, form a portion of a cavalry force, it seems, as a rule, inexpedient to detail them to a protective guard. Such guards must retain great mobility and adaptability, and thus, when necessary, be quite independent of the roads. The services of such detachments are much more likely to be valuable in the combat of the whole cavalry force. It is quite possible that special circumstances, such as strips of country quite unsuitable to cavalry action, or strong hostile positions which must be attacked, possibly at night, may necessitate their being sent in advance.

There are cases, especially with cavalry, where it is essential that the blow to be delivered should come as a complete surprise. To give away the intention, by using advanced detachments, would then evidently be most harmful.* The recon-

naissance of the enemy may have been made by means other than the advanced guard. His position may be fixed already and circumstances may offer a favourable chance of surprise. We already possess the advantages which an advanced guard is employed to gain, it thus ceases to be necessary, and we can proceed at once to the principal act. Napoleon with reference to the matter wrote as follows :—

“ In such a case we should move concentrated, without giving away our plan by advanced detachments, so that the enemy, directly he sees the first troopers, has the whole force on the top of him.”

Particularly in raids such a method may be essential. Rapidity and decision are then the best advanced guard.

This idea enters largely into the shock tactics of cavalry. Unlike the battle dispositions of infantry, which in themselves constitute an efficient protective system, lasting long into the battle, as already explained, those of cavalry are generally arranged so as to deal a decisive blow with the full force of the unit concerned. Even in the cavalry battle, however, an advanced guard may be used to decoy the enemy into a position where the main body can fall on him at an advantage.

Very great importance has always been attached to the necessity of shelter for horses when resting, particularly at night and in bad weather. It is

considered that this should extend, when possible, to the majority of the units which are employed on protective duty. The bivouac is regarded as most destructive to efficiency, and therefore to be avoided whenever possible. Owing probably to the superior breeding, in many countries, of modern cavalry horses, and to the difficulty of obtaining remounts, there appears to be a tendency for this regard for the health of the horse to increase. There is perhaps a danger that this is likely to lead to unnecessary risks to cavalry, if not carefully watched.

To produce the necessary shelter cavalry must be distributed over a large area. This dispersion, if not carried too far, is possibly an advantage, as regards an eventual combat as a whole, for, with large forces at any rate, it is better for cavalry to have to concentrate for action than to spread out from a close formation, provided always that inter-communication is good.

There can be little doubt that cavalry, when in bivouac, is particularly vulnerable to surprise fire from both artillery and infantry. Even if hidden from ordinary hostile observation by the features of the ground, the bivouac can be easily located by aerial reconnaissance. It cannot be defended from its immediate perimeter, unless the total destruction of the horses is accepted as a necessity. To prevent such destruction, even by infantry fire, the defence must generally take place at least half

a mile from the bivouac. If the enemy succeeds, even temporarily, in pushing back such a scattered defence, the horses will suffer extensively. The troopers are far from their horses, which are therefore liable to be rushed by hostile cavalry. The confusion and loss from a night attack are likely to be very great. In the case of surprise artillery fire there appears to be no course open but to take the horses out of it as quickly as possible, but this may be difficult, as the troopers may be required, at the same time, to defend their position with dismounted fire.

On the other hand, if the horses are under shelter, for example, in the buildings of a village, they are well hidden from all classes of hostile reconnaissance. They are defiladed to a very great extent from artillery and infantry fire, and are comparatively safe from attack by the enemy's cavalry. The defence of the locality can be conducted relatively on a very small perimeter, so is likely to be far more efficient, particularly at night. Unless the locality is quite surrounded, eventual escape is by no means impossible. The troopers are close to their horses, and there is much cover from hostile observation and fire within the ordinary village, so that groups of men can slip away more easily than in the open. Even if entirely cut off, the unit defending a locality of this sort has a fair chance of prolonging its resistance till assistance arrives. There is no reason why its horses should

have suffered excessively, and the unit, though reduced, may still be useful as cavalry.

Shelter, however, will not always be available at the points which it is tactically important to hold, and a unit may be forced to bivouac. It will then become a matter of consideration, in the case of a protective detachment, whether the horses should be in the open with the men or under shelter with the next detachment to the rear.

A wide extension for shelter undoubtedly renders it necessary to employ a large portion of the force on protective duties, and its efficiency will certainly suffer from this. For this reason, as well as to ensure more shelter for the entire force, it is frequently better to retire a considerable distance in order to gain for the main body a resting area lying behind some natural obstacle, such as a river, canal or forest, having few points of passage, thus decreasing the amount of necessary local protection, on account of the strength of the position and the extra distance of the enemy. The distance thus lost can be regained next day without great expenditure of effort, provided the re-passage of the obstacle is ensured by proper means, namely a correct use of the advanced guard. Such a retirement, of course, may be out of the question, and a very solid protective system become essential.

The infantryman, when resting, can undoubtedly turn out ready to fight as an individual much more

quickly than the cavalryman, who has also his horse to prepare. This extra delay may be of small significance in the case of a large body, the necessary unreadiness of which includes much larger factors, but it becomes of extreme importance with small detachments, such as those employed on protective duties, for in their case a few minutes' delay may be fatal.

During the hours of darkness the shock action of cavalry may be said to be impracticable, though doubtless individual cases may be quoted where, under exceptionally favourable conditions, it has been found possible to charge with small bodies. Whether in attack or defence, dismounted action must be employed. Night attacks, even for infantry, are difficult, and lead to rapid disorganisation, especially with large forces. Consequently they are usually only of a local nature, being carried out by a portion of a force, and are employed to seize some point of advantage which will be useful in the principal act which is to be executed by daylight with the remainder. If the attack is successful, the position gained has to be stubbornly defended, possibly against great superiority, till the arrival of assistance. It is action which requires special training and a special weapon, which the cavalry soldier does not generally possess, and it separates him a long time from his horse. It is undoubtedly work that is peculiarly foreign to him, and the chances are that he will

not do it well. Under certain conditions it may be essential for cavalry to carry out night attacks, but they are likely to be of a nature even more local than in the case of infantry. The natural tendency will be for rival forces of cavalry to leave each other alone at night, except as regards reconnaissance by small bodies.

On the other hand, the infantry soldier is more in his element and better equipped in every way for such work. A far deeper and stronger system of protection is required to disorganise his attack. If it has only to penetrate a short distance against slight opposition in order to strike considerable bodies of cavalry at rest, it is likely to cause great loss and confusion, without there being much hope of being able to bring off a successful counter-stroke against it by bodies lying further away. Even an inferior cavalry, co-operating with the infantry attack, will probably be afforded a very favourable opportunity for action as soon as it is light. It is for this reason that a cavalry leader will prefer to withdraw from close contact with infantry at night and if he cannot do so, he must employ a highly-developed system of protection, such as that used by infantry.

The retention of the advanced guard is just as necessary in the case of cavalry as it is with a mixed force at rest, and for precisely the same reasons. By securing itself by a protective system, it protects the main body to a very great

extent. What the main body still lacks in this matter must be made up by a system of local protection.

The distance of the advanced guard will be regulated on the same principles as when in movement. It should be in a position, which it has a favourable chance of holding till the arrival of the main body. If the main body, in order to lessen protective duties, has fallen back behind some obstacle, as will frequently be the case, and still desires to retain its strategical liberty of action, the position of the advanced guard must be beyond that obstacle, so as to ensure its re-passage.

The protective detachments of the advanced guard, which are in use by day and are not essential for keeping touch with the enemy, will, like the protective cavalry of a mixed force, seek refuge at night with the advanced guard, when the danger of their remaining isolated in front or flank is great.

Although its necessary unreadiness may be somewhat greater by day, owing to its condition of rest, this is compensated by the fact that it is on or very close to the position which it may be called on to defend, and that the ground is better known. At night its situation is undoubtedly dangerous, especially if there is a possibility of its being attacked by infantry, and it must in consequence often employ a fully-developed protective system on the infantry model. If the cavalry

force includes any rapidly transported infantry, it is advisable, on account of this danger, to attach them to the advanced guard at rest.

In the fully-developed system of protection cavalry regiments will take the place of battalions, squadrons of companies, and troops of sections. There is the same fan-like disposition, divided up into defensive sections or sectors.

As with infantry, if the attack is at all serious, the first body that can hope to employ the offensive with advantage is the general reserve or main body of the advanced guard, and, if the advanced guard must fight where it stands, the best defensive line is that of the section reserves. The picquets and outpost squadrons may then have to retire on to this line, gaining what time they can. The question of whether the detachments which must retreat should have their horses with them or not, will, by day, greatly depend on whether the ground allows of their mounting and retiring without exposing themselves to hostile fire. In inclement weather the horses of the outpost squadrons, if with them, can be under shelter, if this is available, and the situation is such as to guarantee the necessary time for turning out. The picquets and detached posts must remain in a very high state of readiness, and the horses can very seldom be brought under shelter.

At night such a small body as a picquet would, generally speaking, appear to have a better chance

of delaying the enemy, and then escaping back to the outpost squadron, if the horses are kept further back. If the posts of the outpost squadrons are such that shelter exists for the horses, and they are defiladed from hostile fire, it would appear advisable to keep them with the squadron. Horses will never be so well looked after when under the charge of others.

The horses of the section reserves and larger bodies should always be with them, and under the best shelter available.

The measures taken by the main body will usually be of a much more local nature. The units, whatever their size, billeted in the villages nearest the enemy, as well as those on the flanks of the whole area occupied, take measures to defend them by dismounted fire, thus gaining time for the less exposed units in villages in rear to turn out ready for action. In each such village a line of resistance will be selected and improved along the outer enclosures or close to the houses. Dismounted parties will be held in readiness to occupy this at the shortest notice, and the front and flank entrances of the village will be barricaded. If a portion of the perimeter of the whole area occupied by the force is particularly exposed, with reference to the position of the advanced guard, picquets, sometimes supported by outpost squadrons, must be pushed forward in the dangerous direction, and defiles, such as bridges, may have

to be held by detachments. In all cases observation parties should be posted by day, and standing patrols must be employed by night, to watch the principal approaches from a position well outside the billeting area.

It will generally be necessary for the main body of the advanced guard to take similar local measures for its own security.

When the advanced guard is still far from the enemy, or is in a particularly strong position, it may be possible to adopt the local system, or something approximating to it, instead of a highly-developed one.

With small cavalry forces, where both sides desire a decision, the gaining of contact and the fight last so short a time, that it is difficult to imagine a rest coming within this period, but with the great cavalry masses that may be employed in a modern war the battle will undoubtedly be more deliberate in nature, and it is quite possible that, after the principal manoeuvre and deployment of the main bodies are completed, these may be forced to rest in close contact with each other. We must then adopt a system of protection resembling that of a mixed force under similar circumstances.

The question of the protection of reconnoitring squadrons and patrols, which must necessarily remain isolated in very exposed positions, is one of considerable difficulty, and will depend greatly on whether they are acting in a friendly or hostile

area. The views of General von Bernhardi on this subject are worthy of the closest attention :—

“ In any case, endeavour must be made so to dispose the squadron that the chief avenues of communication, at least, will be under observation, and thus closed to the enemy’s despatch-riders. The horses also must be rested, that they may be ready for next day’s work, for a tired squadron cannot reconnoitre properly Should hostile detachments be in the neighbourhood, which is unavoidable during critical days, it will be necessary to be always ready for possible surprise, and to so arrange that the squadron can speedily withdraw from its bivouac on the approach of the enemy It is also sometimes desirable, in order to deceive the enemy, to change the halting place already occupied, after darkness sets in. In friendly country, if an attack is expected, it is often better to spend the night in larger villages, where the inhabitants themselves will co-operate in the service of security. In the enemy’s country, on the other hand—where the hostility of the inhabitants is to be reckoned with—the larger villages must always be avoided, and accommodation must be sought in single isolated farms, which by their position, are in a measure secure from surprise, where the fighting force can be kept together.

where there is nothing to fear from the inhabitants, and which can be quickly abandoned, if possible, unobserved.

The service of security in such situations must be carefully organised and must not consist merely of guarding the immediate environs. It will rather be advisable to push forward posts on the chief lines of approach of the enemy, which will be able to bring in timely news of his advance

In their own country it will often be safer for patrols to seek shelter for the night in the larger villages, because such places will, as a rule, be avoided by hostile troops. It is, however, not only a question of safety, but also of keeping the road confided to them in sight during the night, and of interrupting the transmission of the enemy's intelligence, which will, like our own, be most active after dark. His despatch-riders, however, will probably endeavour to avoid villages. For the rest, patrols in their own country can choose their accommodation freely according to the situation, and can at least always get under cover, even when in the neighbourhood of the enemy.

In hostile country the conditions are different. Isolated and far distant from support, the patrols run great danger, even from the inhabitants themselves, and should never try to spend the night in enclosed villages or

farms. If they wish to get cover for the night, they must look for single houses close to the road and take measures that the inhabitants do not betray them to any of the enemy's troops or to partisans that may be in the neighbourhood. They must also be careful to keep a good look-out and be ready to get away at a moment's notice. They should not, as long as possible, lose sight of the road detailed to them until absolutely forced to, but should watch it by an advanced post in order to interrupt the enemy's transmission service.

When in the presence of the enemy, it will be advisable not to seek shelter, but to spend the night in woods, or at all events distant from localities where forage or food has been requisitioned."

The protection at rest of the protective cavalry is influenced by certain characteristics of that body. It is in itself a protective force, and has often, though weak, to cover a very large front. Its protective dispositions must not only secure its own safety, but also that of the main body. Some of the protective patrols and their supports, which emanate from it, are frequently so far from their main body that their protection cannot form part of a single scheme, but must be independent. The measures adopted by a reconnoitring squadron for its protection may be taken as a guide for their

dispositions at rest, while the main body and detachments close to it can arrange their protection as described in the case of an independent body of cavalry. This dispersion naturally renders the protective duties very heavy, and from this arises the advisability of the protective cavalry falling back under shelter of the advanced guard, when the danger to be expected at night is great.

Chapter XV.

THE REAR GUARD.

WHEN a force retires, a protection system, called a rear guard, is interposed between it and the enemy, with the primary object of allowing the main body to avoid a decision, till its commander deems fit, and ultimately to regain its tactical and then its strategical liberty of action, if these have been lost.

With certain variations, which will be touched on later, the composition and arrangement of the system, which a leader establishes, or endeavours to establish, are the same as in the case of the direct protection of a force advancing.

A retirement may take place without any previous battle, and may be a thoroughly prepared and deliberate manœuvre, carried out with a definite object, such as the weakening of the enemy, the gaining of reinforcements, or the securing of a more suitable area for battle. On the other hand, it may be the result of a lost battle, and may have to be started under the worst conditions of demoralisation. Between these extremes there are many shades of variation, depending chiefly on the

degree to which the force as a whole has been committed to the battle, and the superiority of the enemy. In a forced retirement after a lost battle the commander will endeavour to approximate, as nearly as possible, to the methods pursued in a deliberate retirement, which thus becomes a sort of model for action and must be dealt with at some length.

A rear guard, when pressed by the enemy, has to adopt a particular form of tactics. It retires by "bonds successifs" from one favourable resisting position to another. The enemy as a whole is always to be regarded as superior in *moral*, and generally in numbers. The fact that the rear guard has to rely on its own efforts, and that the distance between it and the main body always increases every time it resists, while the enemy is always being reinforced, must seriously affect the moral condition of the soldier, which has been already lowered by the general idea of a retreat. The hostile superiority in numbers cannot be applied at once, for the enemy has to use the roads for continued movement, and his forces are necessarily strung out in column of route. When the rear guard has halted and faced about to resist, the numbers, which can at once be brought against it, are not very great, but the longer it remains in its position, the stronger they become. If it waits long enough, and is unassisted by the main body, which will usually be the case, its ultimate defeat

and destruction may be regarded as almost inevitable. The enemy's initial weakness, the necessity for even a scanty reconnaissance, and the formation of a plan of action, will always cause some delay in the launching of the attack. As the heads of the hostile columns come under fire of the rear guard, deployment will be necessary. The distance at which this takes place will greatly depend on the extent of the field of fire of the artillery of the rear guard, but as this is one of the principal factors in the choice of a position for delaying action, it will generally be considerable, possibly from 3,000 to 5,000 yards. The enemy's infantry may thus have to advance deployed for several thousand yards before it can open fire. During this it is harassed by the defenders' artillery or that portion of it which cannot be neutralised by its own batteries. As the rear guard artillery will have been able carefully and deliberately to choose good positions, which may be much dispersed, this neutralisation is a somewhat difficult matter, and can only take place gradually as the batteries are located. Though the infantry does not now delay its advance for a preliminary preparation by its artillery, the rate of its progress will depend on the co-operation it receives from that arm. A frontal attack on a good position cannot be rushed, except at the risk of very great losses. It will be nearly always necessary to combine the frontal attack with an envelopment of one or both

flanks of the defence. When the pursuers are moving by a single road, any such attempt naturally entails much delay, as detachments must march considerable distances for the purpose. If cavalry are employed, it must be remembered that a very large proportion of the entire cavalry of a force will be used in assisting the rear guard, and that there is no reason why the enemy's superiority in this arm should be very marked, as it is in the case of the infantry and artillery. There is thus every probability that the progress of the envelopment by cavalry will be opposed by mounted bodies quite capable of seriously delaying it. If the enemy is moving in several columns, the outer ones of which extend beyond the flanks of the rear guard, the danger of rapid envelopment is greater, but even here the arrangements for combined action, and the inward march of those columns on to the flanks, will take time, and, when the flanks are reached, the enemy's enveloping columns may have to progress a considerable distance towards the centre of the rear guard before its situation becomes particularly critical. In this way the enemy must expend a good deal of time in the preliminary phases of the attack.

The rear guard does not wait for the close attack, but falls back as quickly as it can, by well reconnoitred lines, on to its next position, before it can be "fixed" to the first position. It is generally considered that this "fixing" will take place as

soon as the hostile main attack has reached some 1,000 yards from the position, when infantry fire becomes really effective. It means that the retreat of the rear guard can be no longer carried out in an orderly manner, that organisation will be destroyed, and that losses will be very heavy, owing to the effect of pursuing fire, thus rendering the rear guard incapable of continuing to perform its task in an efficient manner. The evacuation of the position will be carried out by alternate sections of the line of defence, usually beginning with those on the flanks, and this must be done so as to escape the notice of the enemy as far as possible. The retirement is commenced by the infantry. The artillery, protected by cavalry, holds on till it is driven to retire, so as to allow the infantry to gain as much start as possible, and then makes use of its mobility and covered lines of retreat, previously reconnoitred, so as to escape quickly from pursuing fire.

The great range of modern weapons has increased the delay which can be caused to the enemy in the preliminary stages of such a combat, but the distance at which "fixing" commences has also been made greater. The pursuing fire of both artillery and infantry now extends over a much deeper zone than was formerly the case, and consequently the retirement from a position has been rendered more difficult and must be commenced earlier. It is just as important that the position

chosen should afford covered lines of retreat, so that the pursuing fire may have little effect, as that it should have a clear and extensive field of fire, so that the enemy may be checked at a long distance.

The efficient action of the rear guard depends on the full use of the long-range power of modern arms, and, when it includes artillery, that arm will undoubtedly play the principal part. The necessity of guarding the flanks and assisting the final retirement of the artillery generally renders the importance of the cavalry only second to that of the artillery. Infantry fire can, and will, often be used at extreme ranges, beyond the "fixing" distance, and good results may be expected from it on suitable ground, but the direct effect of infantry is comparatively small. Its principal effect is indirect. It is a guard and support to the other arms, and it is dangerous to the enemy, not so much by what it does, as by what it may do, if he takes undue risks and endeavours to rush the attack with insufficient means. He can never be certain whether the infantry will finally stand to fight or not, or if it will counter-attack. Though it might not fire a shot, its very presence will be enough to force the enemy to be cautious in his conduct.

Assuming that the retirement of the rear guard from its position has been successfully effected, it is necessary to glance for a moment at the situa-

tion of the enemy. Numbers of his infantry units are deployed at considerable distances from the roads, and their commanders cannot be quite sure if the position is actually evacuated till it is reached. The artillery is deployed in positions far to the rear. The cessation of fire may be a ruse on the opponent's part, and rapid advance in order to employ pursuing fire is risky for both infantry and artillery. Detachments which have been despatched to envelop the flanks, or have wheeled inwards from out-flanking columns, are "en l'air." There is certainly some confusion and mixture of units. Even if units push forward rapidly on their own initiative, so as to harass the retiring rear guard, this independence of action must be finally checked. New orders have to be issued to widely dispersed bodies, for a situation which is not very clear. Are the troops to move across country against a possible second position, or are they to reform column of route on the roads, so as to make progress easier? All this means delay, even with the best arrangements.

Now if the total delay thus gained by the rear guard is sufficient, and it is not pressed by the enemy, the commander will, as soon as he is clear of the zone of pursuing fire, endeavour to concentrate his widely dispersed force into column of route on the roads which are suitable for the purpose. This will eventually hasten the rate of retirement, decrease the exertions which the soldier

has to make, and ensure the force being well in hand. If the main body should require further delay, a new position must be taken up, and the whole action repeated, but even if this is not the case, the troubles of the rear guard are by no means at an end. Its pace is regulated by that of the infantry, and the enemy is free to push forward cavalry and artillery, which can easily catch up the rear guard. The cavalry attached to the rear guard will do its best to check this annoyance, but it cannot be everywhere at the same time. Artillery will move quickly ahead and take up positions to counter the hostile artillery, and thus assist the infantry in falling back. With every care the infantry will frequently come under hostile artillery fire, and be harassed by the enemy's cavalry. This may necessitate the deployment off the road of exposed units, and the formation of detachments. Favourable opportunities may occur at such a time for forming ambuscades to catch a too impetuous enemy, but, whatever is done, delay will be caused which helps the hostile infantry to catch up the rear guard again. In this way the rear guard is not only delayed by the necessities of its main body, but also by the pursuing action of the enemy. Provided the condition of the main body allows, the rear guard commander must take advantage of every slackening in the pursuit to make as much progress as possible. Any unnecessary waiting for the enemy, so as to

utilise a favourable position, is to be strongly deprecated.

The rear guard commander must select a series of positions for delaying action, and these must be carefully reconnoitred in advance, but it is by no means necessary that they should all be held. They should be sufficiently far apart to force the enemy to reform column of route on the roads in advancing from one to the next. Though not always possible, the rear guard commander should try to gain time by separate combats, rather than by a constant running fight, which will rapidly lead to total disorganisation. Any attempt to dispute "every foot of ground" will usually lead to "fixing" and consequent disaster.

When the enemy is confined to a small front, it may be occasionally advisable to send ahead half or a portion of the rear guard, to occupy a second position, while the first is being held, so that the retirement from the first may be covered by the fire from the second. The disadvantage of such a course is that the front which can be covered is greatly diminished, and hostile action against the flanks is made easier and quicker. It is nearly always desirable to be able to cover a large front, though this must not lead to such a thin line that it can be readily rushed by the enemy. If the centre is forced to retire before the wings, the latter will be in a precarious position.

There are occasions on which the commander

should not hesitate to counter-attack the enemy either in force or in the form of an ambushade. When the enemy's column is debouching from a defile ; when he has pushed forward his mounted troops too impetuously ; when he endeavours with strong forces to pass by the flank of the rear guard to get at the main body ; when it becomes clear that a desperate effort must be made to save the main body and eventual " fixing " is seen to be inevitable ; under such circumstances an able and resolute commander may find an opening for such action. The temporary effect may be very great, and the *moral* of the rear guard will be much raised by success. If the time for offensive action is ill-judged, it will certainly increase the difficulties of the rear guard, and will probably lead to its getting " fixed."

Should any hostile detachment succeed in getting between the rear guard and the main body, it must be attacked with every man available, and with the utmost resolution and rapidity. A rear guard, with a great inferiority in cavalry, is apt to be thus cut off by hostile mounted troops, which, with their modern armament, have resisting powers which may well prove formidable.

The principle of having one general protective guard for an army advancing in several columns is applicable to a similarly disposed force when it is retiring, and there appear to be even stronger reasons for its adoption, when this is possible, as

it will be in a deliberate retirement. The period of intense activity of the protective system, in an advance to battle, is generally of short duration, but in a retirement it may extend over a long period, during which the disintegrating effects of the hostile action may be almost constant. A rear guard must be looked on, to a great extent, as a force cut off from its main body. The advanced guard fights so that the main body may fight to the best advantage, but the rear guard fights so that the main body may avoid fighting. It does not matter much what form the rear guard action takes, as long as it is successful. Consequently the fight of the rear guard is more independent. Though we may prefer a general advanced guard for a force, when advancing, to a series of tactical advanced guards, we can still admit the possibility of a successful direction of the latter towards a common definite object by the commanders of the different columns. On the other hand, when the situation is altogether dictated by the enemy, unity of action by a series of tactical rear guards cannot be thus ensured. If a tactical advanced guard enters into action half an hour too soon, no great harm is done, but, if a tactical rear guard abandons a position half an hour earlier than its neighbour, the result may be disastrous. The possibility of carrying out the delicate and complicated action demanded from a protective system, when a force is retiring,

depends essentially on unity of command and organic cohesion. With a series of tactical rear guards the extent of front covered is too great to allow of the former, and the latter is impaired by the fact that the protective detachments all belong to different units. The rates of progress of the different columns will never be exactly the same, so that the whole front presented by the tactical rear guards will be irregular, leaving the flanks of some of them exposed to hostile attack. The reasons for adopting a general rear guard are thus very strong.

There should be no attempt to make this body cover the whole of the army, but it will be used in the direction, generally the centre, where the hostile pressure is greatest, for the enemy will generally make use of a strong advanced guard in following up a retiring opponent. The columns which are uncovered by the general rear guard must have their own tactical rear guards to guard against pressure from hostile detachments, or flank pursuing columns, which, if of sufficient importance, can be attacked in flank by the general rear guard.

The general rear guard will try to make use of several roads, so that a deployment on a broad front can be rapidly effected when necessary. Its own rear protective detachments, which are the same as those of a similar body when advancing, though usually with artillery added, will be used

as long as possible to resist the pressure of pursuit, but, as this increases, the main body of the general rear guard will be gradually forced to come into action. It will retain a reserve, as long as it can, and this should be on the road nearest to which the hostile pressure is likely to be greatest, as for example, where the enemy has a parallel pursuing column. It is also important to save a portion of the guard from as much fatigue as possible, so that it may be fit for the duties which will have to be performed when the force halts.

The "independent" cavalry of an army, which is following up a retiring opponent, will have very few opportunities for successful action in direct frontal pursuit, unless the troops are greatly demoralised. It will have to march far and quickly to make a raid in rear of the retiring main body, and, with modern means of reconnaissance, such a large body is certain to be detected and opposed, if it has such a mission. Action against the flanks of the main columns does not usually promise very favourable results unless there is great loss of *moral*. The most tempting bait is undoubtedly the flanks and rear of the rear guard. If this can be "fixed" or cut off, it will not only result in great loss and disorganisation to the rear guard, but the leader may be strongly influenced to give battle with his main body, as he will not readily consent to the sacrifice of his rear guard. If the rear guard can be forced to retire too quickly, the

main body may not be able to avoid action with the pursuing columns.

The principal task of the "independent" cavalry of the retiring army will be to frustrate any such attempt, and it will consequently be mostly employed on the flank of the rear guard, on the side where the enemy's cavalry mass is known to be. If it is superior to the hostile cavalry, or can hold its own, it can sometimes be used to delay the pursuing columns by attacking them in flank, but the sacrifice entailed will seldom be justified, unless the pressure on the rear guard is so great, as to make a diversion absolutely essential. It can be employed to sweep down on the artillery and cavalry of the enemy's pursuing columns, if these are pushed too impetuously ahead of their infantry, when the rear guard is falling back from one position to another. If it is plainly inferior to the hostile cavalry in the open, it can be used to "block the routes upon which parallel pursuit is operating, by barricading roads and occupying important points and defiles, especially during the night."* All these courses of action require the closest co-operation with the rear guard, and it is very difficult to see how this can be ensured unless the "independent" cavalry is under the rear guard commander. If the main mass of the hostile cavalry should attempt any operation outside the sphere of influence of the rear guard commander,

* Von Bernhardt, "Cavalry in War and Peace."

or if there is any other special reason, the "independent" cavalry can be given a separate mission by the leader of the whole army. There is no reason, because the mass of the cavalry is under the rear guard commander, why the initiative of its commanding officer should be unduly curtailed. A cavalry leader must always retain great freedom of action, or favourable opportunities for its intervention will be inevitably lost.

As long as the leader of the whole army is unable, or does not wish, to form a general rear guard, the "independent" cavalry must remain "independent." Its commander will endeavour to help the retirement on similar lines, but his efforts will tend more to assist a single tactical rear guard than the protective system as a whole, and he cannot possibly know where his help is most required.

Whether there is or not a general rear guard, it is very difficult to see how protective cavalry is to be employed, if it is all placed under a single commander. As soon as any real pressure on the protective system commences, the possibility of the action of this cavalry, as a single body, ceases. Every rear guard, general or tactical, requires cavalry in order to make possible its peculiar method of action, and for this the divisional cavalry is quite insufficient. There are not only two, but many, flanks to be watched, for the retirement of the different portions of the protective

system is certain to be very uneven. When the infantry of a rear guard evacuates a position, the artillery remains behind till the last possible moment, which necessitates its being protected by cavalry. The enemy is not at all likely to mass the whole of the cavalry belonging to his army corps or divisions so as to suit a combined organisation. Each rear guard, general or tactical, should have cavalry attached to it, and this will be under each rear guard commander.

It will generally be advisable to spare the divisional cavalry (or mounted infantry) with rear guards, as much as possible in the actual retirement, so that it may be available for the mounted duties which are essential when it comes to rest, especially at night.

A low state of *moral* will always lead to an overestimate of the strength of the enemy, so, unless information is available, an army may continue to allow itself to be harassed by inferior forces. Aerial reconnaissance will, in many cases, be able to procure sufficiently accurate information to prevent such a state of affairs, but certain conditions may cause it to fail. Consequently, cavalry reconnaissance must continue, however difficult. The more distant work on the enemy's flanks will generally fall to the lot of the "independent" cavalry, while the remainder of the cavalry will have to reconnoitre the forces constituting the enemy's frontal pursuit, possibly penetrating the

tween his columns. The cavalry's main duty is to facilitate the retirement, and large reconnoitring bodies will not be available, unless the enemy is inferior in the mounted arms. Well mounted officers' patrols, working by stealth, are indicated for this work. The difficulty with flank patrols, which are left far behind, will always be to get information back in time to be useful, so relays may have to be dropped wide on the flanks. If in a friendly country, it will probably be advisable for such patrols, after gaining valuable information, to send it to the nearest telegraph office, even though this is far to the flank. If the retiring army is acting in a hostile country, there can be no great object in attempting to screen the flanks of the main body from small hostile reconnoitring patrols, for the enemy will be supplied with the most detailed information by the intelligent inhabitants of the towns or villages which have been traversed.

It is an old principle that a rear guard, should be very strong in artillery. The intention undoubtedly was to allot to a rear guard more guns than its ordinary proportion. For example, if a general rear guard consisted of a division, that artillery should be taken from other units and added to its own, or that a brigade as rear guard should get more than one third of the guns of a division. Though it had disadvantages, this used to be quite feasible, and on the whole advantageous. Of late years the proportion of guns to

infantry has greatly increased, but the efficient management of co-operation between the infantry and the large amount of artillery, which is normally associated with it, has become one of the most difficult tactical problems. The artillery in a rear guard action must seek for positions from which it can open fire on the enemy at a long range, and from which it has a chance of being able to withdraw without overwhelming loss. As it may finally be greatly outnumbered, and suffer not only direct, but also oblique and sometimes enfilade, fire, it must, as a rule, look for safety in covered positions and dispersion. Good covered lines of retreat must also be available. All these points make it difficult to employ a force of artillery out of proportion to the strength of the infantry, although that infantry may be more extended than under ordinary conditions of attack and defence. If we allot an excessive number of guns to a rear guard, they may prove more of an encumbrance than an assistance. On the other hand, the essence of a rear guard's delaying combat is very powerful artillery action. The solution of the difficulty appears to lie in allotting a normal proportion of artillery, and in keeping it plentifully supplied with ammunition, so that its quick-firing properties may be highly developed. This will always be much easier in the case of a force retiring than in that of one which is pursuing. By this means we can avoid depriving other units of the main

body of some of their artillery, which they may urgently require a little later for their own action.

In the ordinary delaying action of a rear guard the use of field fortification has little or no place. As explained in Chapter xiii, it has a "fixing" tendency, which is particularly dangerous. It is only when the rear guard has to stand to resist to the utmost, that it is useful, but it is usually almost impossible to foresee when and where this will occur.

The opening up of a great number of lines of retreat, so that the rear guard, especially its artillery, can safely and easily retire from position to position, is such a vast undertaking, with reference to the whole daily retrograde movement, and it is so uncertain beforehand what lines will be really useful, that it will seldom be attempted, except in very particular cases.

If the destruction of railways and roads is advisable, with due regard to the ultimate requirements of a retiring army, it offers an easy means of delaying the enemy. The most vulnerable points of both are the bridges. It is on this class of work that the engineers will be extensively employed. In order that such demolitions should be thoroughly effective, it is necessary that they should be prepared deliberately, the actual destruction only taking place when the rear guard has passed. With this object the engineers should be sent far ahead of the rear guard, probably ahead

of the main body. It is much better that this work should be directly under the commander of columns or the headquarters of the whole force.

Nearly all engineer work requires time combined with a definite object, and this is just what a rear guard commander will find it difficult to supply. There are undoubtedly certain means of delaying the enemy, which can be hastily executed, such as the barricading of roads, the blocking of fords, the firing of villages, etc., etc., and these can be undertaken by the rear guard, but on the whole there seems no reason why an abnormal proportion of engineers should be allotted for this. It is even likely that some of the engineers, which normally belong to a unit, will be taken away to prepare demolitions on ahead, or to meet the needs of the main body.

The tendencies, which have already been described, afford us some data for arriving at a suitable composition for a rear guard, although this will vary greatly according to circumstances, and the time available for its organisation.

The general rear guard, or the rear guard of an independent column, should consist, whenever possible, of one (sometimes more) of the larger units of the force it is protecting, and should, as in the case of an advanced guard, be from one-third to one-sixth of the whole. It would appear better to err on the side of strength than on that of weakness, except, perhaps, in the case of the

tactical rear guards of a force supplied with a general rear guard. If the unit is a self-contained one, such as a division in the British organisation, there appears no reason now-a-days to allot to it any additional artillery from other units. No doubt, under the French organisation it would be assisted by an allotment from the corps artillery. The same applies to the divisional cavalry (or mounted infantry) and the engineers. If the rear guard is less than a division, it should have a proportionate share of the divisional cavalry, (or mounted infantry), artillery and engineers of its division. Even very small rear guards should have some artillery. Under ordinary circumstances the whole of the "independent" cavalry should be under the commander of a general rear guard, or the rear guard of an isolated column. The protective cavalry should be allotted to the commander of the general rear guard, and the tactical rear guards, in proportion to the importance of those bodies. Even if there is no general rear guard, each tactical rear guard should have its share.

As long as the idea of retirement continues, there is no advantage in the leader of the whole force remaining with the rear guard. In the case of the advanced guard, its action is the introduction to that of the main body, and this will generally necessitate the presence of the leader, but the commander of a rear guard has a specific duty, which

he is probably able to perform just as well as the leader, whose presence is more likely to complicate matters than to simplify them. He can help the rear guard best by ensuring the regular retreat of the main body. The greater the disorganisation and want of *moral* of the main body, the more essential is the leader's presence with it.

It is generally stated that the arrangements for protection at rest will be made by the main body, so that the rear guard may pass through the protective system, and be able to gain a well-deserved relaxation from its labours. This constitutes a relief of the rear guard, the new protective troops performing the rear guard duties next day. When small forces are concerned, this relief of the rear guard is no doubt quite possible. Its harassed soldiers will doubtless prefer to march several miles extra in order to gain a decent night's rest, and to have an easier task the next day, or when the retirement begins again. But the disadvantage of such a relief must be given its due weight. Practically the whole of the cavalry is employed with the rear guard, and it cannot be relieved. It will, therefore, have to be associated with a new rear guard, and be under the orders of a new commander. The co-operation of the cavalry and the rear guard will suffer from this change, as the advantage gained of experience in working together will be lost, and the new commander is certain to differ in his views, as regards methods

of co-operation, from the old commander. The result will probably be bad, and there is much to be gained from continuity in command and composition of the rear guard. Of course, if the rear guard is totally exhausted and badly demoralised, it must be relieved, but this will by no means be always the case. It must always be remembered that the physical exhaustion of the enemy will probably be quite as great, and his supply arrangements far worse. In the case of a general rear guard we may regard this relief as generally quite impossible, on account of the distances involved.

The dispositions of the protective system at rest will be the same as those of a force advancing. Any attempt to adopt a cordon system of protection is to be deprecated even more strongly, and the unity of the protective guards must be maintained. Every endeavour should be made to allow the cavalry the maximum of rest, so it will usually fall back behind the protective system of the infantry. The columns of the main body must be echeloned in great depth along the lines of retirement, so that the retreat can be continued with the minimum of delay. (*Vide* Chapter xii). They must supply their own local protection, as in the case of a force advancing.

If the retirement is to be continued next day, and the dispositions of the main body are correct, there ought to be no necessity for a line of resistance. If the rear guard has to gain delay by a

stubborn resistance on any line, it will inevitably get "fixed." If the protective system is attacked in force, there ought to be a continuous delaying retirement, commencing with the picquets. There will be more danger of the "fixing" of the rear guard, because the resistance to the enemy's advance will, at night and when surprised, have to commence with infantry instead of artillery fire.

It is evident that the distance of the protective system from the main body must be such that it has the necessary room to fall back gradually without getting "fixed," while the main body is getting in motion, and that the rear of the main body should not be under hostile artillery fire, when it is really started. The depth of zone allowed should be very generous, and the leader who does not fully appreciate this will be unable to carry out an organised and successful retirement.

Now, although, even in the case of a deliberate retirement, there is an inevitable loss of moral condition, especially in an army which is not habituated to war, its leader may desire to stop the retreat, and seek for a decision by acting either defensively or offensively with the main body, against the enemy who is pursuing his army.

If the leader desires to take up a defensive position with his main body, the deployment of his columns can be made on the end which is furthest from the enemy, and the retirement of the army and its protective system can continue till this

deployment has been completed. Though, on account of aerial reconnaissance, it is almost hopeless to expect a complete surprise, there can be little doubt that the enemy's columns, if the pursuit is carried out without due precautions, are very apt to meet with a severe check when they suddenly encounter the whole of the opponent's army thus drawn up for defence. Taken as a whole, they are necessarily confined to the roads, and there will be an undoubted tendency not to wait for their full deployment, but to attack with insufficient force, as this course has been necessary up till then in pressing the rear guard. An initial reverse, arising from this, may assist in securing the eventual victory of the army which was previously retiring.

If the leader, instead of taking up a defensive position, determines to pass to the offensive, the deployment and arrangement of his columns can be similarly effected. The attack, suddenly launched against an impetuous enemy, whose pursuing columns are strung out for miles, has very great chances in its favour, if the *moral* of the soldier is sufficiently raised by the resumption of the offensive.

It is these points, among others, which make the pursuit of an army, which has not been already defeated, particularly difficult, and which have a tendency to moderate the impetuosity in pursuit, even after a victory has been gained.

As long as the leader is free to choose his own time for action of this nature, the necessary unreadiness of a retiring army differs greatly from that of an advancing army, as detailed in Chapter ii. Its preparations for action can be carried out to a very great extent without a change in the conduct of the portion of it, namely the rear guard, which is in contact with the enemy. The delay, represented by the factors of deployment and forward displacement in the manœuvre of the main body, does not exist. Owing to the continued close contact of the rear guard with the enemy, the knowledge of his dispositions is likely to be greater than in the case of an army advancing, and thus sufficient to justify the formation of a plan of action for the whole army without any special resistance by the rear guard. This will also permit of the elimination of the delay required for the preparation and issue of orders. Though the time required for the lateral displacement of the different units of the main body in the manœuvre, leading up to their suitable arrangement for battle, cannot, with safety, be altogether eliminated, it can be materially lessened by the direction originally ordered for the retirement of the different columns of the main body and of the general rear guard. The latter can be used to draw the enemy in a direction differing from that of the main body, for, like the general advanced guard, its attractive power will always be great.

On the other hand, there can be little doubt that the factor of friction will be greater in a force retreating than in one advancing. The lower *moral* will increase it in many ways. Troops and their commanders do not so readily respond to calls on them, and, in modern campaigns, where there is little habituation to war or natural reliance, gained from experience, on the leader, no matter what he may order, friction is likely to be great. It is for the leader to judge how much this will counterbalance the other advantages, in the matter of readiness, which he undoubtedly possesses. It is one of those questions in which a correct appreciation of the moral influences in war is of such great importance. If the moral conditions of the troops is favourable, there can be no doubt that the time and space, which must be gained by the rear guard, outside its ordinary delaying action, so that the main body can lay aside its necessary unreadiness in order to give battle, will be much less than in the case of an advancing army. As the leader of an army, the *moral* of which is bad, will probably only desire to avoid battle, the question of change to defensive or offensive action, as a rule, only affects an army in which the *moral* is favourable. We may thus conclude that, for the same strength, the distance of the protective guard, for this purpose, may be much less than with a force which is advancing.

If the leader is not free to choose his own time

for change from retirement to action, for example, if the rear guard gets unexpectedly "fixed" and a battle is necessary to disengage it, just as much time and space are essential, as in an advance, for a well-planned offensive in order to relieve it.

We must, however, regard the question of the distance of the protective guard in another way, namely as regards the possibility of the main body being able to continue its retirement unmolested, and the danger that exists of the rear guard being cut off and destroyed. A great body of troops, divided up into long columns, which are preceded by many miles of transport, will always be subject to delays, and will move more slowly than a smaller body unhampered by transport.* Bad staff work, a misreading of orders and maps, and many other causes, may all lead to totally unexpected delay, especially in starting from a state of rest, even though the roads are good and uninterrupted.

The rear guard, if it is to maintain its distance, even when not actually pressed by the enemy, will consequently have to move, on an average, at the same slow rate as the main body, and this makes it easier for the pursuit to catch it up.

It can easily be stated that the minimum dis-

* The vulnerable points on the roads to be traversed, such as bridges, should be protected by the troops which have been on the lines of communication, but it is always possible, when in a hostile country, that the inhabitants may be able to interfere with some of them. It is fairly easy to arrange for the protection of the very important points, but the destruction of even a very small bridge may cause great delay in a column.

tance of a rear guard should be such that the main body cannot come under hostile artillery fire, say two or three miles, but this is evidently not enough. The chance of the main body being delayed must always be reckoned with, and we must arrange, by allowing more distance than the minimum, that this delay will be absorbed in the space existing between the main body and the rear guard, while still leaving the minimum distance, so that the rear guard is not easily forced to resist too long, from the close proximity of the main body, and that there should be no interference with its regular, but limited, delaying action.

The length of the delay of the main body can sometimes be foreseen, and a proportionate allowance in distance made for it, but it will generally be a matter of chance, and cannot be calculated, and all that can then be done is to allow a factor of safety in distance for it. From this defensive point of view, the distance of a rear guard should be considerably greater than what is usually allowed for an advanced guard.

On the other hand, if the rear guard is very far behind the main body, the risk of its being cut off will be much increased. Quickly moving hostile detachments, composed of cavalry and artillery, will have a favourable opportunity of getting round the flanks, working inwards on to the line of retreat, and firmly establishing themselves, possibly without encountering any opposition.

The sense of isolation, caused by too great an intervening distance, will act unfavourably on the *moral* of the soldier, who, as long as he believes the main body to be fairly close, will not abandon all hope of assistance from it, if the urgency is extreme. The difficulty of the relief of the rear guard also increases with its distance.

Taking all these ideas into consideration, it may be stated, without trying to establish any hard and fast rule, that from a defensive point of view, namely the avoidance of action by the main body, the distance of a rear guard should be greater than in the case of an advanced guard which is intended to stand to fight, and that from the offensive point of view, namely when a leader requires time and space to prepare a battle with his main body, it may be very considerably less. In this sense a general rear guard is both offensive and defensive in its nature. Offensively, its distance may be much less than that of a general advanced guard ; defensively, there is no necessity for it to be at a much greater distance than a tactical rear guard. The nature of the tactical rear guard is principally defensive, and it should be at a greater distance than a tactical advanced guard. Hence in an extensive protective system we may expect to find the general rear guard only slightly in rear of the tactical rear guards, which will be separated from the columns of the main body by a distance which might, at first sight, appear excessive.

Before engaging in battle, a careful leader should consider how he is to retreat, in case he is beaten. In a delaying action this question will deeply influence his dispositions, but when he fights to win, it must be altogether of secondary importance, and his plans must then be made whole-heartedly, so as to defeat the enemy. The admission by the leader of the possibility of a reverse will always affect the *moral* of those serving under him, unless they have the experience and knowledge of war to understand fully the necessity of precaution in this matter, and that such precaution does not necessarily mean want of confidence in success.

The position of at least most of the great units of a force in battle can be approximately foreseen, and their possible lines of retreat can be settled beforehand, but, as we descend in the scale, any preconceived views of where smaller units will be at the crisis appear valueless, and it is impossible to say what arrangements for their retreat will be suitable. Although the front of a modern battle may be very great, intercommunication should be both sure and rapid, thus rendering more easy than formerly the issue of orders for retirement in accordance with the actual situation, and when the necessity arises. For these reasons it would appear advisable, except in the case of a delaying action, to restrict the communication of the leader's views on this subject to the commanders of the great self-contained units directly under

him, and of any detachments which may exist, so that, in case of necessity, they may be prepared to issue orders which will be in harmony with the general plan, not only to their combatant units, but to their supply and other columns on the lines of communication. These commanders, except under special circumstances, should not pass on the leader's views to those under them, even in a diluted form, till the retreat is really necessary.

In whatever manner a leader may choose to fight a battle, whether he begins by retaining a reserve for the decisive stroke, or commits all his great units at once in order to carry through a pre-conceived plan, the turning point of battle, in the great majority of cases, is not traceable to some definite moment or action in a particular part of the field. On the enormous fronts which are employed in big modern battles there will be a great difference in the condition of units, for while some will be totally exhausted and demoralised, others will still be in a good state of discipline and capable of further effort. It is the moral and physical condition of the army regarded as a whole, the superiority in strength of the hostile reserves, the loss of important ground, and the threatening of the lines of communication, which will produce the ultimate decision of the leader to retreat. The leader is the focus of all the rays of feeling emanating from every portion of the force. The news of favourable and unfavourable events and in-

fluences are both cumulative in character. A general impression as regards the result is gradually built up in the leader's mind, and, if this is adverse, it must imperceptibly undermine his resolution, however great it may have been at the beginning. As this impression of inferiority grows, he may, most rightly, struggle against it, and hope that by his own skilful management or by a change of fortune, he may still succeed in the end, but there comes a time when he knows that, whatever he does, the final result is inevitable, and that perseverance in his efforts is mere recklessness and disregard of the true nature of things. It may be far more beneficial for his country that he should retreat, and be able to renew the fight at some future time, when conditions may be more favourable, than that his army should be totally sacrificed to his own obstinacy. We must, therefore, be prepared to find that the majority of retreats, even in the case of the greatest leaders, have been begun before the last reserve has been engaged and the army wholly and irretrievably committed. In cases where persistence has been carried to an extreme, the retreat has been unorganised and singularly disastrous, except when opposed to a very inert enemy.

As the impression of inferiority grows in the leader's mind, there will be a natural tendency in him to pass more and more from the consideration of how the victory can still be won to that of the

management of the possible retreat. This change in itself will tend to exaggerate the idea of inferiority, and a leader will do well to take every precaution to guard himself against it. Besides his own resolution and strength of will, there appears to be only one way of doing this. When the impression of inferiority commences, he should detail a trusted subordinate, either the chief or some other member of the staff, who is thoroughly acquainted with the whole condition of affairs, and knows the leader's views, to confine himself to a constant consideration of how a retreat is to be carried out, whenever it may be ordered. This officer must see every report, and think how it will alter his scheme for retreat, which must thus be constantly kept up to date in accordance with the progress of events. When the crisis comes, the leader will have a plan ready. He may be able to accept it in full, or, if he is not, it will at least assist him in arriving at a decision, which will embrace all the material factors.

The commanders, who have been entrusted with the views of the leader on the subject of retreat, can act in a similar manner.

So great is the difficulty during daylight of retreating troops, which are in close contact with the enemy, without great losses and demoralisation, that a commander, unless actually forced from his position, by direct attack or by fear of being cut off, will nearly always prefer to hold on until dark-

ness sets in. Darkness decreases the effect of infantry fire to a very great extent, and renders that of artillery practically of no account. It may be presumed that the victorious side has, generally speaking, succeeded in gaining fire superiority of both infantry and artillery, so that there will be an advantage to the conquered side of a lessened superiority as regards fire effect during darkness. At first sight, darkness would seem to lead to far greater confusion among the units of a force which uses it to start a retirement, but this is by no means certain. The great losses suffered from hostile fire in retreating from close contact with the enemy during daylight will probably lead to even greater disorganisation. The victorious side has every advantage in pressing on against the retiring adversary during daylight, but will seldom do so willingly by night, as it does not require very great opposition to create dire confusion in his own ranks. Night attacks need a thorough organisation and a definite objective, which will generally be found wanting, against a retiring adversary, after a hard fought battle.

For similar reasons, the cavalry of the conqueror will be able to give him comparatively little direct assistance during darkness. Its principal object would rather seem to be to use the hours of darkness, if it is in a condition to do so, to gain a position from which it can harass the opponent next morning.

When a retirement begins during darkness, every endeavour must be made to start off the non-combatant portions of the army as soon as possible. These will usually be in fair order and already on the principal roads. The introduction of motor transport will evidently greatly facilitate this work. Engineers can be sent ahead to prepare demolitions.

There will be a very early convergence of combatant units on to every road leading in the required direction. A very large number of small columns will thus be formed. The necessity of putting some distance between such columns and the enemy, with the least possible delay, will seldom permit of much organisation. Units will probably be greatly mixed, and the columns will vary much in size and composition. The senior officer on the spot must take command, regardless of the larger units to which the detachments properly belong, and he must do his best to get some order into the column. Artillery and cavalry, being the quickest moving arms, will be started first, so as to cause as little delay as possible ; the infantry which has suffered most will follow next ; the freshest infantry available will be kept back for the rear guards. These rear guards will vary greatly in strength, and will often be very mixed in organisation, having portions of a good many units.

The " independent " cavalry, probably on the

flank of the army, will fall back, delaying, to the best of its ability, any pursuit on parallel lines which may be attempted by the hostile cavalry.

In some cases, for example, where a large unit of the army has suffered little in the battle, the organisation of its retreat can be made more complete.

Whether a halt for rest is made meanwhile or not, arrangements are necessary so that at daylight the cavalry and a strong body of the artillery of the extemporised columns are added to their rear guards.

If columns converge on each other, as will be inevitable in some cases, a new organisation of the combined columns should be undertaken at once.

When a retirement has to be carried out by day, it will be equally necessary to extemporise groups for command, centring on all the roads by which retreat can take place. Lateral movement to regain a normal organisation will be quite impossible, till there is relief from hostile pressure. As in the case of retreat during darkness, the first object will be to clear the roads in rear, as far as possible, from supply and other columns, by issuing timely orders for their retirement, and to despatch engineers for the preparation of demolitions. The next object will be to relieve the infantry, which is in immediate contact with the enemy, and which is nearly certain to have already suffered heavy losses, and to be much shaken as regards *moral*.

The only method, as a rule, of accomplishing this is to take up rallying positions with such troops as can be collected. For this purpose all the larger infantry reserves, which have not already been completely used up, and which are not essential for the immediate requirements of the firing line, should be moved back to the rallying positions. It is probable, at such a time, that, the whole of the artillery will be in action, but a portion of it, about a third, must be withdrawn to the rallying positions. Heavy batteries, and those field artillery batteries which have much dead ground immediately in front of them, should be chosen, as they will be useless for the work that the artillery will soon have to perform.

The rallying positions, which ought to cover the roads by which the retreat will take place, should, if possible be far enough back to be out of immediate hostile fire, so that the organisation of their defence may be possible.

The firing line, assisted by such supports and reserves as may remain near it, will gradually fall back towards the rallying positions, by alternate fractions, in the deployed formation in which they are fighting. This retreat must be covered by the fire of the batteries which remain in position. The artillery must direct its fire on the pursuing infantry, regardless of the fact that it may thus release many hostile batteries from the neutralisation that it has hitherto maintained. It must

hold on till its own infantry has passed it, and longer if possible. The loss of a few guns is of small importance, provided the enemy can be checked. To permit of full artillery fire effect, up to the last moment, positions with dead ground in front are quite unsuitable, and the infantry in its retirement must endeavour to avoid passing through the guns. When this artillery finally retires, the batteries in the rallying positions should be able to take over the task of covering the further retreat. Infantry and artillery, in falling back, must avoid masking the fire from the rallying positions. As soon as these are passed, they will carry out such temporary re-organisation as is possible, and get into column of route on the available roads.

Any cavalry, which may be available for a retreating group of units, must use every effort to fall on the pursuing enemy, forming ambuscades for the purpose. The slightest check to the enemy is often of the greatest importance, and the cavalry must be prepared to sacrifice itself for this object.

The losses and demoralisation resulting from the retirement on to the rallying positions will generally be very great, and the troops thus engaged will seldom be fit, for some time, for further action, so must be given every opportunity for recovery. The garrisons of the rallying positions must gain time by their resistance for these troops to get some distance in advance, avoiding getting "fixed"

themselves, and must act as rear guards to the columns, till the first halt takes place.

The "independent" cavalry will generally have to act entirely on the initiative of its commander. It will usually be on the extreme flank of the army, and its principal duty will be to act against the similar hostile body, preventing or delaying the pursuit, which it will probably endeavour to carry out on parallel lines. Much can be done by the destruction of bridges, the stubborn holding of defiles, the construction of barricades, etc., etc. Even when inferior, favourable opportunities for offensive action will occur, when the hostile cavalry attempts to wheel inwards to attack the infantry and artillery columns.

Whether the retreat commences by day or night, re-organisation must seriously be taken in hand at the first halt. Arrangements must be made for the extemporised columns to converge in proper order on to the good and direct roads, for units to be reformed, and for tactical rear guards to receive a solid organisation approximating to that in a deliberate retirement. After this no opportunity should be lost of re-establishing order and discipline.

With large forces, except under very favourable circumstances, it may take several days before a general rear guard can be evolved, but until this is done, the protection of the army cannot be considered as complete.

Readiness for battle is unreadiness for the march. From a line formation, with practically no depth, a disposition has to be elaborated with columns, twenty or thirty miles deep, and with a complete protective system, in which considerable intervening distances are required. In a retreat all this has to be done under the most unfavourable conditions of initial disorganisation and demoralisation, and sometimes during constant hostile pressure. It is undoubtedly an enormous task, and it is only rendered possible by the fact that the difficulties of the victorious enemy are practically equally great.

This is evident in material matters, for an army can only press the pursuit for a very short distance in its deployed form. Re-organisation has to be effected, ammunition replenished, columns formed on the roads and a protective system established to safeguard those columns from a sudden counter-stroke by the enemy.

But even from a psychological point of view the victorious army does not possess all those great advantages, which are generally assigned to it. The exhaustion of the troops is often even greater than that of the adversary, and there is little difference as regards the losses. Though there may be a widely diffused and definite consciousness of victory, the soldier is naturally inclined to rest content with this, and to avoid further action, which may possibly be adverse and lessen the glory

already gained. "The whole weight of all that is sensuous in an army, its wants and weaknesses, are dependent on the will of the leader. All the thousands under his command require rest and refreshment and long to see a stop put to toil and danger for the present. . . . These interests have a sure conductor into the heart of the leader."*

The leader, himself, is probably greatly exhausted by the struggle, both physically and mentally. It is only the very select few who will realise in full the enormous advantages to be gained by a continuation of intense effort. However ambitious, energetic and hard-hearted the leader may be, his further efforts, in the great majority of cases, will be weakened by this almost universal feeling. It is for these reasons that an immediate and relentless pursuit is so seldom seen in real war, and that the defeated army is able to escape absolute destruction.

* Von Clausewitz "On War," Book iv, Chap. xii.

Chapter XVI.

SECONDARY PROTECTION.

A PROTECTIVE guard, called an advanced guard, is interposed between an army and that portion of the enemy's forces, with which the leader desires a decision. If the hostile forces are divided, it is his object both to prevent, if possible, other portions from taking part in the battle, by which the decision is to be gained, and to avoid having his attention diverted from this principal task by the action of hostile detachments against any part of his army, not covered by the advanced guard, or against his line of communications.

A protective guard, called a rear guard, is interposed between an army and that portion of the enemy's forces which constitutes the principal danger, and with which the leader endeavours to avoid or postpone a decision. An attack by a hostile detachment against any part of his army, not covered by the rear guard, will evidently constitute a danger to the safe retreat, and must be warded off.

All detachments made for these purposes constitute, what may be conveniently called, secon-

dary protection. Under this heading may be included containing forces, flank guards, rear guards to forces advancing, and advanced guards to forces retiring.

When an army is acting on interior lines against an enemy operating with divided forces, a choice must be made by the leader as regards the portion against which his main effort is to be directed. When the other portion, if unopposed, is in a position to arrive on the field of battle, before a definite decision has been reached, it is evidently necessary, if this is possible, to make an endeavour to delay it, so that it will be unable to do so. It must be eliminated or neutralised, and this forms a valid reason for making a detachment. The great object is the defeat of that portion of the enemy's forces against which the main body is moving, and it is therefore necessary that the main body should be as strong as possible. Hence the detachment must be as weak as possible, consistent with the task of delaying sufficiently the hostile force against which it is despatched ; we do not seek for a victory, but for delay.

As its action will generally resemble that of an advanced guard, when falling back, the delay which can be gained by such a detachment, under the same conditions of ground, will evidently increase with the depth of zone over which it can continue to act. Thus the strength of the detachment must be greater, the less the distance from

the field of battle, proposed for the main body, at which contact can be gained with the enemy's second force. For example, two units, when opposed to four, may be able to gain a day's delay with a depth of zone of two days' march, but three units may be wanted to gain the same delay with half the zone. The strength must also be calculated with reference to the facilities for delaying action afforded by the zone. If it contains numerous defiles, rivers crossing the advance of the enemy, and positions strong for defence, a smaller containing force will suffice. It will generally consist of one (sometimes more) of the self-contained units of the army, to which cavalry will be added in accordance with the character of the country, the whole being under a single commander, who should possess in a special degree the powers of initiative and resource. There are many generals, who are admirable commanders when acting in a subordinate position under the supervision of the leader, who would be quite useless for this class of work. The commander of the detachment will be given his mission by the leader in the form of instructions, but he must be allowed to carry it out in his own way, for the work is clearly strategical in nature.

He must endeavour to gain a thorough knowledge of the features of the zone, over which he will have to act, so as to be able to take full advantage of them. He will generally arrange his detachment as an independent force, using his cavalry

for exploration and protection, and employing an advanced guard and any other protective guard which may be necessary. In the great majority of cases he must avoid the temptation of splitting up his command into a cordon system. His task demands concentration, unity of command and great mobility. His general course of action will consist in heading off the enemy, and in taking up strong defensive positions, which must be evacuated before he gets "fixed." It is only when he finds that he cannot gain enough delay by such action, and that he is getting too close to his main body, that he should, as a last resort, stand to fight stubbornly. In the case of a rear guard, the frequency, with which defensive positions should be taken up, is regulated by the progress of the retirement of the main body, an appreciation of which is not particularly difficult; the delay required is limited, any excess being dangerous. With a containing force, the maximum of delay is essential, and the occupation of positions may have to be more frequent, for it is almost impossible to calculate how long the battle of the main body will last. The enemy must be forced to devote his attention to the detachment, and, with this object, as well as when any favourable opportunities occur, the commander must not hesitate to adopt offensive tactics. There is also, perhaps, in the conduct of such a force, a higher possibility of using strategem than in nearly any other form of action. If

the delay being gained is insufficient, it will be necessary to employ demolitions of bridges, railways, etc., to make it greater, for the success of the main body, in its first battle, must be of greater importance than facility for movement in subsequent operations. In the great majority of cases the general direction for falling back will be towards the main body. No doubt, if the enemy can be persuaded to follow the detachment in a direction leading to the rear of the main body, a deeper zone for action will be gained, and the portion of the enemy, engaged with the containing force, will be placed at a disadvantage should the main body, after a successful battle with the other portion, then march against it. The great danger in trying to do this is that the enemy will be in a favourable position to mask the detachment, and march, without opposition, with the most of his strength, to the assistance of the rest of his force.

If the leader is successful in his battle against the first portion of the enemy, he may desire to move against the second with the bulk of his main body, leaving a detachment to pursue or contain the first. The first detachment then becomes really his advanced guard, and will act as such, forming the pivot for the manœuvre of his main body. If the first portion of the enemy rallies, and resumes the offensive, the second detachment must act as already described in the case of the first detachment.

It is quite possible that the situation may be so uncertain that the leader is unable to settle the point at which he should use his main body. The more irregular the form of warfare, for example in "People's Wars," the more likely is such a state of affairs. Under such circumstances, he may employ two, or possibly more, protective guards, so that, when the situation has developed sufficiently to allow of his coming to a decision, he may be able to use one of them as an advanced guard. The other or others will then be used as containing detachments, if their presence as such continues to be necessary, or if it is not, they will rejoin the main body with all possible speed. At the height of his genius Napoleon was the greatest exponent of this play of protective guards. He safeguarded the freedom of action of his main body from all dangers, and yet he was able to assemble the maximum of strength on the battlefield. The unnecessary multiplying of detachments is the sign of want of determination. It is unquestionably a very dangerous course to pursue, and it needs a sound judgment to limit their number and strength to what is really essential.

The actual lines of communication of an army, being vulnerable along their entire length, more especially since the introduction of railways, their immediate protection, against raids and smaller attempts, must be ensured by a cordon system of many weak bodies, but large detachments must

be kept in readiness at suitable positions to ward off serious hostile operations against them. It is evident that such detachments must be either strong enough to ensure the defeat of large hostile attempts, or be at such a distance from the lines of communication that they are able to delay the enemy in reaching them till assistance arrives. In this class of operations delay is not enough, definite victory is vital, without calling on the main body for assistance. The great majority of continental nations are now in a position to use second or even third line organisations for this protection of the lines of communication, so as to leave their best forces intact for contending with the enemy's principal armies.

Before the introduction of railways, and even for long afterwards, while their transporting power remained very limited, a containing force, posted at a great distance from the area of operations of the principal army, was frequently to be regarded as something quite separate. The original allotment of troops for the two objects, if wrongly calculated, could not be altered, and mutual co-operation between the parts was impossible. Now-a-days the transporting powers of railways, when fully utilised, have rendered distance of comparatively small importance. There is thus a far more intimate connection between all the forces which a State puts into the field, for the transfer of strength from one to another can be carried out

rapidly. Those employed on secondary theatres of war can be no longer looked on as separate units, but become true detachments of the principal army.

In the ordinary application of the term a "flank guard" means a body which is clearly tactical in nature, being much closer to the force guarded and much weaker than a containing detachment, such as has been described above. When an army is advancing, the advanced guard is calculated to protect its necessary unreadiness against the principal hostile force, as it is directed against it. If the enemy has divided his forces into two or more great parts, this disposition will generally be known, and strategical containing bodies can be despatched against those portions, which do not form the immediate main objective. It is also open to the enemy to act against the flanks of the long columns composing the main body, which are evidently very vulnerable, by smaller forces, the action of which cannot be easily foreseen. Detachments for such a purpose, unless they possess great mobility, will probably be lost to the hostile leader for the decisive battle, and they thus constitute, as a rule, a most undesirable division of force for him. Hence, as regards regular troops, they will usually be limited to cavalry, supported by horse artillery, the reconnoitring mission of which will naturally often lead up to this harassing of the flanks. Irregular forces, which do not

possess sufficient discipline or organisation to be used in a pitched battle, may often be employed, with advantage for the purpose, in fact, the more irregular the war is in nature, the more frequent will become this form of engagement.

The vulnerability of the flanks of a column, twenty or thirty miles long, is very great. Lengthy portions, consisting of ammunition columns, supply and other trains, have little or no defensive power. Surprise action against artillery in movement may be extremely destructive. Boldly led attacks on any portion will cause much loss, delay and temporary disorganisation.

There are two methods of protecting a column against such hostile incursions. One or more detachments can march parallel to the column, keeping pace with it, or detachments can be placed on the flank, by the most advanced troops, remaining in position till the whole column has de-filed past them, after which they join the rear of the column.

For the first method a road is necessary, approximately parallel to the one used by the column, and at a distance from it sufficient to allow the flank guard or guards, without being too much isolated, to prevent its being taken under artillery fire. When the column to be protected is very short, one flank guard may be enough for the purpose, but when we have to deal with columns, perhaps twenty or thirty miles long, the matter is more

complicated. A concentrated protective guard, as we have seen in other cases, is necessary for the security of a body against a hostile force, the strength of which is important with reference to that body, but it cannot be expected to ward off the attacks of small hostile detachments, such as those with which we are now dealing. Such a general protective guard must have depth of zone for its efficient action, and, when this is allowed, parties of the enemy, especially when of a mobile character, can easily penetrate between it and the main body. If it is kept close to the main body, the enemy has only to wait till it has passed in order to march inwards to attack. The protection which the column requires is far more local in nature, and must be ensured by a cordon system of much smaller bodies. The number, strength and composition of these flank guards must depend on the nature of the country and the general amount of annoyance expected. The difficulty is, that, as these detachments are constantly in motion, their composition cannot be regulated in accordance with the special danger that may exist at particular points which have to be passed. The position of the enemy, the configuration of the country and the network of roads will greatly increase the likelihood of attack at certain places. Their composition can only be calculated on a sort of general average of danger for the whole march, and, when once settled, there will be great

difficulty in changing it to meet any alteration in the situation which may subsequently be brought to light.

From two to four companies of infantry, with a small party of cavalry or mounted infantry attached, will generally be enough for such moving flank guards, and there may be two or three miles between them. The flank guards opposite the non-combatant portion of the column can expect no reinforcements, and as this will probably be the objective of the enemy, they should be stronger than those in advance. The risk of attaching artillery to such small bodies is very great. They are singularly exposed to surprise, for they will have to move very quickly to keep pace with the main column, the road they follow being probably worse and longer than that by which the main body is moving. Without some guns they will be very helpless against an enemy, who has artillery with him, but if we increase their size so as to make the attachment of artillery possible, the intervals between them must be made greater, which will leave serious gaps through which hostile parties can penetrate. Directly any guard halts to resist, a gap is at once formed in the line of flank defence, and this increases with the duration of its combat, and cannot be easily closed again. This combat may have to take place at a spot from which there is no direct line of retreat open towards the main column, which is also not in a position to reinforce

the flank guard quickly. It is true, however, that within an hour or so it may be strengthened by the flank guard following. Such flank guards should, as far as possible, belong to the portion of the main column opposite to which they are marching. They must protect themselves against surprise by reconnoitring, and by the formation of small protective guards in front, rear, and on the exposed flank, though in the last case a mounted party will generally be necessary in order to avoid delay.

The second method of protection, namely, by stationary flank guards, is by far the more efficient in the great majority of cases. There will usually be very good reasons for considering that the column is particularly exposed to be attacked at certain points on the route to be traversed, and these can be secured by the posting of flank guards, the composition of which can correspond to what is known of the anticipated danger. This will generally allow of fewer and stronger flank guards. A detachment of this kind can thus take up a position of readiness, at a sufficient distance from the main road to ensure the column against surprise artillery fire, it can reconnoitre, and then act in accordance with circumstances from the centre at which it is posted. While the attention of the commander of a moving flank guard is divided between the duties of keeping pace with the column and of resisting hostile attack, that of the com-

mander of a stationary flank guard can be confined to the latter. He has a choice of ground for his combat, his communications with the column can be ensured, so that he can readily fall back or receive reinforcements from it, and there is no particular reason why he should be surprised, if he takes ordinary precautions. For these reasons artillery can, with safety, be allotted to the more important of such flank guards.

The advantages of such a system are obvious and it will usually be adopted, but there are certain difficulties which require careful attention.

If these guards are formed to the flank from the troops which are at the head of the main body of a column, there is a danger that hostile detachments may move inwards directly after the advanced guard, with its subsidiary protective bodies, has passed, and strike the main column near its head or occupy the position intended for the flank guard, thus causing delay. When advanced guards are pushed well forward, as they generally should be, this is quite possible, in spite of the front covered by the protective screen. The flank protection is thus commenced somewhat too late. If the flank guards are posted from the advanced guard, this will be obviated, but the advanced guard will be gradually reduced in strength, and its organisation more and more affected till it may be quite incapable of performing efficiently its proper mission. Hence the troops

designed for use as flank guards should be clearly recognised as extra to that composition of the advanced guard which is necessary for its own duties. They should be directly under the column leader, though they may immediately follow the advanced guard. The proper allotment and posting of these flank guards form another reason why it is so advisable for a leader to be with the advanced guard on the march. If flank guards are necessary for a series of marches, the troops for the purpose must either leave the main body in the morning in time to join the advanced guard, which often means a very early start, or they must be sent on the evening before, which may lead to complications as regards billeting, supply and organisation. These disadvantages must be weighed against that of the partial failure of flank protection, when detachments are made from the head of the main body.

Assuming that the first flank guard is posted from the special troops with the advanced guard, an example will show what subsequently happens to it in the case of a long column, such as that of an army corps or two British divisions.

The following assumptions are made :—

Length of column as in plan 7.

Length of march 16 miles.

There are 14 hours of daylight.

Start at 6 a.m.

Average pace $2\frac{1}{2}$ miles an hour.

The column is billeted on a depth of 12 miles both before and after the march as in plan 8.*

The position of the first flank guard is 4 miles along the road from the head of the main body and $2\frac{1}{2}$ miles to one side.

The first flank guard gets under arms at 4 a.m. and reaches its position X at 7 a.m., having marched $6\frac{1}{2}$ miles.

The head of the 2nd division arrives opposite it at 9.45 a.m. The head of the transport column arrives opposite it at 12.30 p.m. The tail of the transport column arrives opposite it at 5.15 p.m. If the first flank guard is not relieved during the day, it can start to come in at 5.15 p.m. It has to march $2\frac{1}{2}$ miles to the road, and then some 12 miles to gain its proper place in the billeting area. If the road is perfectly clear, it will arrive in $5\frac{3}{4}$ hours or at 11 p.m., having been under arms for 19 hours. It may have to be under arms again at 5 a.m. next morning to continue the march. Even if it has not had to fight, this strain on the physical endurance of the men is excessive, and it is evident that a relief should be arranged for it during the day.

Now suppose this relief takes place from the head of the 2nd division :--

* *Vide* Chapter xii, p. 234 note. It would evidently be impossible to carry out the march by daylight if the whole force were to move from a bivouac immediately round the starting point to another similar bivouac at the end of the sixteen miles, as it would take sixteen hours for the tail of the column to get in.

The relief can be effected at 10.45 a.m. It reaches the road at 11.45 a.m., but this is still blocked by the 2nd division, though it can follow that body at 12.30 p.m. It has still 12 miles to march, so it will arrive at its proper resting-place at 5.15 p.m., having been $13\frac{1}{4}$ hours under arms.

The relieving flank guard from the 2nd division starts at 6 a.m. and is in position at 10.45 a.m. If no longer required, it can leave at 5.15 p.m., and has some $9\frac{1}{2}$ miles to march to reach its proper place for rest. It will arrive at 9 p.m., having been some 16 hours under arms.

Now suppose the relief takes place from the tail of the 2nd division :—

The relief can be effected at 1.30 p.m., and the original flank guard can reach its billets ($14\frac{1}{2}$ miles) at 7.15 p.m., having been some $15\frac{1}{4}$ hours under arms.

The relieving flank guard from the tail of the 2nd division starts at 6 a.m., and is in position at 1.30 p.m. If no longer required, it can leave at 5.15 p.m., and has some $2\frac{1}{2}$ miles to march to reach its proper place for rest. It will arrive at 6.15 p.m., having been $13\frac{1}{4}$ hours under arms.

In all cases the flank guards have to march about 21 miles.

In the example the second method of relief forms

a better division of labour than the first. Theoretically, an exact equality would be secured by taking the relieving troops from a point $2\frac{1}{2}$ miles from the tail of the 2nd division.

If the danger to the flank of the column lasts more than one day, flank guards must be in position at different points on the 12 miles of the flank of the old billeting area (Plan 8) even before the march begins, and they must remain till the last of the transport has passed. For example, the last one at \odot cannot start its march till 10.45 a.m. When the column has reached its new billeting area, flank guards will still be required, so those already in position must remain, or be relieved from the divisions opposite them. Thus during one day it may be necessary to protect 28 miles with flank guards, namely, the depth of the billeting area added to the length of the march.

As the flank guards supplied by the 2nd division cannot expect any reinforcements, and will have to protect the non-combatant portion of the column which will probably be the enemy's objective, they should usually be made stronger than those supplied by the 1st division.

In the system of protection described above, whether moving or stationary, the flank guards do not seek combat with the enemy, but should usually be content to ward off his attempts against the column, and their offensive action cannot be carried very far.

They will be connected up with weak patrols, so as to prevent the penetration of very small hostile reconnoitring parties and the exit of the inhabitants.

As the danger of hostile attempts diminishes, the system will gradually merge into that form of very local flank protection already described in Chapter viii.

The divisional cavalry (or mounted infantry) of the British organisation will seldom suffice for this work, and it will be necessary to reinforce it by taking one or more squadrons from the protective cavalry.

When an army is retiring, either moving or stationary flank guards can be used in a similar manner. It will, however, be a matter for consideration whether they should be made to cover the distance between the main body and the rear guard as well as the flank of the main columns.

In the manœuvre of an army leading up to battle the advanced guard forms the pivot on which this is carried out, and the main body has frequently to move to a flank under its protection. The advanced guard then becomes really a flank guard or containing force with respect to the main body. Its action under such circumstances has already been fully considered.

During a battle exposed flanks, which the enemy is in a position to attack, must be protected, and this is usually done by retaining a portion of the

force concerned echeloned in rear, so that it can move against the flank of any hostile body, which attempts to envelop the force.

Flank guards, great or small, which are necessary in movement, are generally equally essential at rest. When we come to the establishment of a protective system at rest, we must not change them into something else, but, as in the case of an advanced guard, maintain their unity for action, avoiding the tendency to spread them out into a wide cordon system.

Independent bodies of cavalry will require the organisation of flank protection on very similar lines. They may have to detach containing forces, and their flank guards will be moving or stationary, mounted or dismounted, according to circumstances.

When a column is advancing, a detachment, called a rear guard, follows close behind it. It has two distinct duties, namely, to act as a secondary protective body, and to perform certain police work. Its protective duty is similar in nature to that of a moving flank guard, as it wards off minor hostile attempts against the rear of the column. Its police duty consists in helping broken-down transport, collecting stragglers, and keeping away marauders and other undesirable persons. The more irregular the form of warfare, the greater, generally speaking, is its importance. Its strength and composition must be regulated in accordance

with the danger anticipated, and may vary from a company to a small mixed force. It appears customary for most armies to adopt the following composition for ordinary use :—

For an army corps . . . 1 battalion and 1 squadron.

For a division . . . 4 companies and $\frac{1}{2}$ squadron

For a brigade . . . 2 companies and $\frac{1}{4}$ squadron

The rear guard should be detailed from the last combatant unit of the column. If for any reason the non-combatant portion of the column is separated from the combatant portion by a great distance, its protection must be arranged separately, as in the case of a convoy, and the rear guard will follow the fighting units. Its distance, in any case, should be sufficient to ensure the rear of the column against surprise hostile fire.

Its action will, on a small scale, closely resemble that of a rear guard to a force which is retiring. The duties are frequently very harassing, and the men arrive very late in camp. It is, therefore, advisable that it should be relieved daily, if possible.

When an army moves in several columns, each of them will have its own rear guard. Special circumstances may occasionally necessitate the formation of a larger containing detachment, possibly consisting of all arms, to keep at a distance any important hostile force which is threatening the rear of the army.

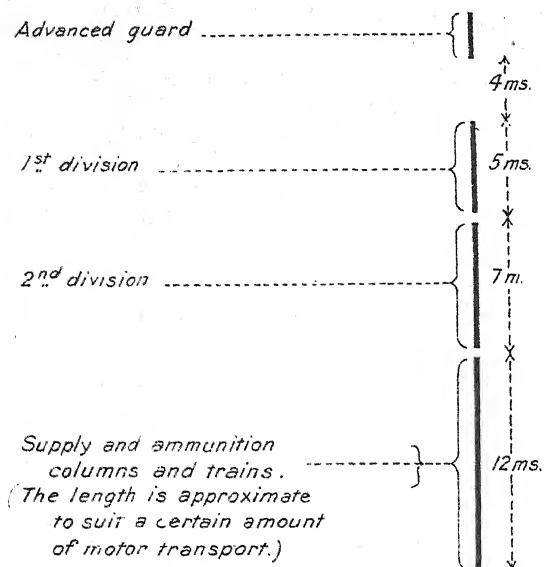
When a column is retiring, it is preceded by a

secondary protective detachment, called an advanced guard. Its composition will normally be a good deal stronger than that of the rear guard of an advancing force, being regulated in accordance with the danger anticipated. Unless the leader of the column has formed the intention of turning at bay, there is no great object in cutting down such an advanced guard to very small dimensions. Occasionally when the enemy is in a position to make a serious attempt to cut off the retreat, it may have to be very strong indeed, consisting of all arms. There is here no question of playing with the enemy. The mission of such an advanced guard is always essentially an offensive one. He must be attacked without any hesitation, with the utmost dash and in superior strength, for the very existence of the main body may depend on its uninterrupted retreat. Each column should have its own advanced guard, and special detachments of all arms may have to be detailed, in addition, to engage important hostile bodies.

An essential duty of all such advanced guards is to repair any damage that may have been done to the lines of retreat, and to prepare the demolitions which are necessary to delay the pursuing enemy. They should, therefore, be very strong in engineers, and ample bridging materials will often have to accompany them.

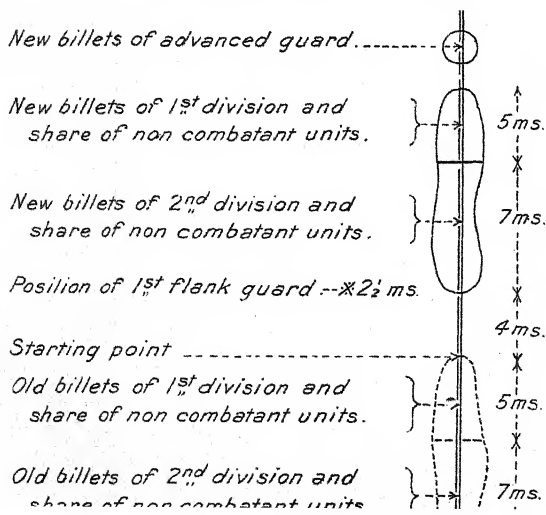
When serious hostile opposition is expected, the

Army Corps in Column of Route.



PLAN 8.

Army Corps in billets.



advanced guard must be pushed well ahead of the non-combatant portion of the column, so that the main body may not be delayed by the duration of the combat.

Chapter XVII.

TERRITORIAL PROTECTION.

IN all the forms of protection which we have so far considered, the conduct of the protective guard wholly depends on its relations to a main body, and its sole duty is to protect and assist in every way the force of which it forms a detachment. Its strength, composition, distance, and methods of action are altogether subordinate to the leader's plans for using the main body, which, though generally in a state of necessary unreadiness, is always present. We have now, however, to deal with a form of protection in which other factors must receive attention.

Although a concentration of all available forces, in order to defeat the enemy, is a fundamental principle in war, the protection of the frontier of our own country against even temporary violation by foreign forces, has always been regarded as an almost sacred duty, and it cannot be lightly put aside, although by doing so we may imagine that we are conducting war in a more scientific manner. The occupation of a portion of our territory means a loss of power to our fighting strength in soldiers, re-

sources, and supplies, and often also in war material and means of transport. A great many of these things will add to the enemy's resources. If a portion of our country remains in the hands of our opponent at the end of the war, it will tell in his favour in settling the terms for peace. But in addition to these material losses, there arises in the country as a whole a distrust, and want of confidence in the army and the government. The ordinary citizen of a state does not appreciate the principle that the individual must often suffer for the good of the great majority. If thousands of his fellow countrymen are abandoned to great hardships without a blow being struck in their defence, it may be his turn next. There are many, even in the army, who are deeply interested in the territory abandoned, and who will regard the surrender with strong disfavour. By all, except a very select few, it will be looked on as a disaster, and the moral tone of the army and the country will suffer. The spread of education, the almost instant diffusion of all information and the general softness produced by modern civilisation, have all tended to increase this feeling. The more democratic the government of a country, the more extended will it be, and the greater influence will it have. A powerful and popular ruler, or a very strong government, may occasionally afford to neglect this, but the good will of the masses must remain a very serious consideration in the great

majority of cases. To ensure national energy, a government must respect national sentiment. Even Napoleon, when he marched against the allies in Belgium in 1815, was compelled to leave considerable forces on his other frontiers. They were not strong enough to resist an invasion, except in appearance, but, if added to his main army, might have won him the victory.

Armies have to be mobilised and then concentrated before they can be used as effective weapons of war. Both these processes are complicated in nature, and plans for them have to be elaborated in time of peace. If these plans are subjected to interruption by hostile invasion, confusion is introduced and they are delayed, disorganised, and may have to be greatly altered. The smooth and thorough concentration of our forces can best be ensured by carrying it out at such a distance from the frontier that the enemy cannot interfere with it. The campaign can then be commenced with a complete organisation. But if this scheme is known to the enemy, he can safely carry out his own concentration close to the frontier, and, assuming that he is not tied to a mere defensive, the first contact of the main armies will take place within our territory, for, whatever protective forces we may have in front of our concentration, they must be regarded as only capable of delaying, not of stopping, the main hostile masses. Thus there is an immediate surrender of some of our

territory, with all its moral and material disadvantages, which even subsequent success will never entirely eradicate. Such a distant concentration is sometimes absolutely necessary, but it is always a confession of weakness in our powers of rapid preparation for war, and often of the insufficiency of our forces for the object in view. Hence, as a rule, both states will endeavour to expedite their mobilisation and concentration as much as possible, so as to be able to effect the latter close to the frontier, thus avoiding initial loss of territory. An exact equality in time for this preparation will never exist, and each supreme commander will fear that his adversary may be able to carry it out as a whole more rapidly than himself, or start the campaign by using a portion of his forces, the preparation of which may be specially expedited, and thus be able to fall on him when still unready. To avoid this, there must be room between the area of concentration and the frontier for the interposition of protective troops, the resistance of which will be able to make up the difference in time in preparation. Thus, not only is it necessary to protect the frontier from violation from the moment war is declared, but it is also essential to guard the concentration of the main body. With these objects the permanent peace disposition of troops is very thick in the immediate neighbourhood of the dangerous frontiers, and they are constantly maintained in a high state

of readiness by an increased peace establishment and by other means, so that they can act efficiently at a moment's notice, and can be thoroughly completed in the shortest possible time. We must always regard such frontier detachments, not only as defensive in nature, but also as capable of adopting the offensive from the moment war is declared, for, although both sides may make similar arrangements, it may always be to the advantage of one to cross the frontier and attack the enemy. Though this offensive power is limited, it is immediately available. These formations usually form a portion of the great units which occupy the military areas lying next to the frontier, which, from their position and organisation, possess the power of rapid mobilisation and concentration, so that they should be completely ready for action at any desired point in the shortest time, possibly on the third day after war begins.

The main concentration can take place in two ways. The means of transport can be used to move the great units simultaneously, so that all are ready at the same time, say on the ninth day, or they can be successively devoted to the movement of groups of units, so that, for example, the first group is ready on the fifth day, the second on the seventh, and the third on the ninth. The advantage appears to be almost entirely with the second method, for it is better calculated to enable us to resist any early offensive movement on the

part of the enemy, and it gives us the power of adopting the offensive with a portion of our forces at an unexpected moment, should this be desirable. It is, however, possible that it may slightly delay the completion of the entire concentration.

In this way the frontier detachments may have to act unassisted for some two days, and the great frontier units for at least a similar period, after the war begins.

Now, accepting the necessity of the immediate employment of the very mobile frontier detachments to prevent an unopposed violation of our territory, and to gain information as regards the enemy, it is still a question as to whether we should use the more ponderous masses of the great frontier units to support their action in advance of the general concentration, or look on them as a portion of the main body, leaving the whole work of delaying the enemy to the smaller bodies. To those who condemn the principle of the general advanced guard, and are willing to trust the entire protection of an army to the independent cavalry, combined with tactical advanced guards, with or without the addition of mixed detachments, the use of the great frontier units to support the frontier detachments constitutes a dangerous division of force. Such an advanced mass is too strong, as it will form an irresistible temptation to isolated action, possibly offensive in nature, and it is too ponderous to admit of that mobility which is essen-

tial in a protective force. If the enemy is ready first and attacks in strength, it is too weak to resist till assistance arrives, and it will be destroyed, its battle forming a strategically separate application of force.

Anyone who believes in the principle of the general advanced guard will have no difficulty in producing very strong counter-arguments. If the enemy is ready and advances first, the delay that can be gained by the frontier detachments is not enough, unless our main concentration is very far back, which would render the period of resistance excessive for such weak, isolated bodies. There is an inevitable and serious loss of territory, with all its disadvantages, and, to limit this, there will be a tendency to hurry our main body into action before its organisation is complete. If the enemy is so forward in his arrangements, and our own so much behindhand that such a large protective mass as the great frontier units, with all the advantages of knowledge of ground, and the support of frontier fortifications, cannot resist till assistance arrives, it is quite certain that the enemy, only opposed by frontier detachments, will be able to strike our main body long before it is ready. In the zone between the two main rival concentrations, there exist strategical points of enormous importance for the subsequent action of our main army, namely, defiles, river crossings, railway junctions, forts and fortresses, still often insuffi-

ciently prepared for defence. Are we to remain inactive while a hostile advanced guard army, only opposed by a mere screen of frontier detachments, takes possession of these by main force? It is impossible. We must have an advanced guard army also, capable of flanking the action of the screen when it is driven back to these points; a force which can meet an early hostile offensive, or, if expedient, can be used to prepare our own offensive; a power which will prevent the enemy from developing a situation, which will deprive our main body of all freedom of action, and finally reduce it to the defensive pure and simple. That the Germans in 1870 were able to do with an extremely weak series of frontier detachments, only proves that the French were totally inert and unenterprising. Even a few vague reports of French troops on the Saar were sufficient to cause Von Moltke to withdraw the concentration of the 2nd Army from that valley to the Rhine, which certainly would not have been necessary had the protective system been more solid. Judging from the present disposition of their forces on the French frontier, the Germans do not, apparently, intend to adopt the same course a second time.

During the first period of two or three days, when the protection is dependent on the frontier detachments alone, they necessarily form a cordon system. Our first duty is to minimise the inherent weakness of this, as far as possible. Dif-

ferent portions of the frontier will have different values from a military point of view. The initial positions and strength of the enemy's frontier troops are, as a rule, perfectly known. The outline of his alternative schemes for concentration cannot be altogether kept secret, for the network of railways, the length of platforms at the different stations near the frontier, the general trend of military opinion, besides many other indications, will be carefully studied by the general staff. The various strategical points on our own side of the frontier will in themselves vary in importance, and they will gain or lose in value, according to our plans, and the probable plans of the enemy. Some portions of the frontier may be very easy of access, others very difficult by nature, or rendered so by artificial means. The frontier should be divided up into sections in accordance with its natural features and a detachment allotted to each, varying in strength in accordance with its military importance.* As there may be a good many of

* Types of detachments :

No.	Infantry.	Cavalry.	Horse Artillery.	Field Artillery.	Mounted Infantry.	Engineers	Remarks
1.	1 to 2 Battalions.	2 Squadrons.	1 Battery.	—	$\frac{1}{4}$ Company	$\frac{1}{2}$ Company	The mobility of horse artillery makes it particularly suitable for such work.
2.	1 Brigade.	1 Regiment	1 Battery.	3 to 6 Batteries.	$\frac{1}{2}$ Company	1 Company	
3.	1 Division.	1 Brigade.	1 Battery.	—	1 Company	—	

these detachments, in immediate contact with the enemy and far from support, making control difficult, it is generally advisable not to have any of them too large. On very unimportant portions of a frontier a very thin cordon of irregular forces, such as the frontier or forest guards which are met with on the continent, may be quite sufficient. The nature of the action of these detachments generally makes it essential that they should have artillery, though not to such an extent that the infantry becomes a mere artillery escort, and that they should be well supplied with cavalry. It is very necessary that they should be extremely mobile.

The frontier peace dispositions should lend themselves to the ready organisation of these detachments, though not to such an extent as to make the proposed war dispositions quite apparent to the military authorities on the other side of the frontier. The troops should be trained for this detachment work over the ground which will probably form their section on the outbreak of war, so that they may become thoroughly acquainted with every detail of it. The mission which each detachment will have to perform should be clearly laid down by higher authority, so that it may be in harmony with the plan of campaign, and it must be studied and practised by those who are responsible for carrying it into effect. Both the civil and military authorities must work together,

so that the highest possible readiness is always maintained for instant action.

The political frontier often forms a most irregular line, and for tactical reasons it may be impossible to defend some portions of it, such as very pronounced salients, in which a detachment would be in imminent danger of being cut off. It must, for purposes of defence, be rounded off to a certain extent, though this should not be done more than is absolutely necessary. On the other hand, sharp re-entrants may necessitate the occupation of some hostile territory directly war is declared.

The sections should have sufficient depth to allow of the delaying action of the detachments really coming into play. Long, shallow sections are most objectionable. The extent of the section should not preclude the possibility of the co-operation of neighbouring detachments. If these are about ten to twelve miles apart, it will be sufficient.

A detachment should not attempt to guard every point in its section. Concentration as regards width of disposition is essential, but it should be echeloned in very considerable depth, taking the form of a main body with an advanced guard pushed well forward. Plans 9 and 10 give types of the dispositions which are recommended by Lieut.-Col. Dumas in his *Des Manœuvres de Couverture*. By some such disposition we hope to ensure exploration by the cavalry, protection of

the detachment, and observation of the enemy and ground by the advanced guard, and resistance to the enemy's advance or offensive action by the co-operation of the whole detachment. The disposition should be essentially one of readiness to act according to the situation, which cannot be foreseen, and not a fixed and inert defence, arranged in a preconceived manner. The advanced guard is echeloned back from its point, so as to gain delay without getting "fixed." The front and gaps between detachments are watched by patrols. There is a division of labour which facilitates the performance of the mission.

The actual positions of the advanced guard and main body of a detachment form a somewhat complicated problem. The detachment must be posted so as best to observe, to resist the violation of territory, to protect points of importance, to co-operate with neighbouring detachments, and to guard the concentration of the great frontier units, and, perhaps, that of the great mass of the whole army. Though it has a section to protect, its position should be such that it can readily co-operate in the contemplated use of the advanced guard army as a whole. It should be able to act as an advanced guard, or a flank guard to it or a part of it, or to some other army. Its position must be suitable for offensive action, either very limited in strength, or as a part of the main plan of campaign. The main body of the detachment

should be covered from hostile observation, so that its action may come as a surprise to the enemy. It should form a kind of ambuscade, ready to spring on the enemy, so as to assist the retirement of its own advanced guard, or to attack the flank of any hostile force which endeavours to penetrate the gap between it and the next detachment; good communications in different directions, for advance, co-operation with the next detachments, lateral movement or falling back, are evidently most important.

An enemy attacking such a detachment's section, even with considerable superiority, will not have an easy task. There is much of the unknown in front of him, both as regards the ground and the strength and dispositions of the adversary, and movement will betray his own, to a great extent. If he endeavours to penetrate between two detachments, he is at once threatened in flank by them, and he does not know what may eventually be in front of him. If he attacks frontally, he is delayed by a well prepared and well considered defence, first by the advanced guard, and then by the main body of the detachment, and during this process he is attacked in flank by all available forces from the neighbouring detachments. The defender will gradually fall back, resisting, after the manner of an advanced guard (*vide* Chapter ix), but with the advantage of a thorough knowledge of the ground, and of well chosen and pre-

pared delaying positions, which will also enable him to use offensive counter-strokes without great risks of getting "fixed." The enemy has to expend much time and effort in discovering what is really in front of him, and this will only be accurate for a short time, and over a small distance. There is no reason why the defender, with his thorough knowledge of the ground, should suffer excessive losses in carrying out his delaying retirement. Great initiative must be left to the commanders of detachments, but it will generally be necessary to limit this, as regards advancing across the frontier in force, to attack the enemy. An offensive of this nature not ordered by high authority, though resulting in a temporary success, may lead up to the formation of an extensive battle totally contrary to the general plan of campaign.

The frontier detachments, gradually falling back and constantly resisting, endeavour to gain as much delay as possible, but when they approach the points, which it is of much importance to retain, or the areas in which the concentration of the great frontier units (of which they form a part) is taking place, there may come a time when it is apparent that the delay gained is not enough, and that the depth of zone allowed or their previous resistance has not been sufficient. Although it is easy to calculate how long a concentration will take, it is impossible to say beforehand exactly how much delay can be gained by the detachments,

for this will depend greatly on the strength and leading of the attack, and the knowledge of the hostile commanders as regards the country and the dispositions of the defenders, all these being unknown quantities. After a certain point further retirement may be out of the question, and, as a last resort, a detachment may have to stand to fight stubbornly till assistance reaches it. To help in this, a good defensive line is selected, entrenched and generally prepared beforehand, at a sufficient distance in advance of the important points or the concentration areas. A detachment, in falling back, will not always be able to do so in a fixed direction, so that a single limited position is unsuitable for the purpose. The prepared line should be extensive enough to give a choice of ground to be occupied. It is quite possible, too, that the next detachments or portions of them may be able to co-operate in this defence. The prepared position must not in any way be regarded as a fixed point at which the forces, coming to the assistance of the detachment, must adopt a defensive attitude. They should in turn remain mobile, and manœuvre to gain time by offensive or defensive tactics, as the situation requires. The existence of such a position must not be allowed to curtail the delay which can be gained while retreating. As long as the losses of the detachment are not likely to lead to demoralisation, or it is not in imminent danger of being cut off, the delaying

action should be continued in advance of it. It may be absolutely necessary to reinforce the detachment, either before or after it reaches the prepared position, by troops from the great frontier unit which is concentrating behind it, and a selection should then be made from those troops which are most ready. This should, however, be avoided as long as possible, as it is of the highest importance that forces should be fully ready for war before being used, and that the large units should act, as far as possible, together and not be split up prematurely.

The influences of forts, fortresses and other permanent works on a frontier must necessarily be very great as regards the employment of protective forces. They have doubtless been constructed with many objects in view, of which the following are a few :—

1. To cover the mobilisation and concentration of the armies.
2. To allow of economy of force on the portion of the frontier covered by them, so that the masses for employment elsewhere may be increased, especially with a view to offensive action.
3. To form a bastion from which a strong body may issue, so as to take in flank hostile forces engaged in attacking or resisting on the neighbouring stretches of the frontier. To prevent such a pos-

sibility the enemy must use a large force, which weakens his masses elsewhere, but his opponent is then able to use the forces, with which the sortie might have been effected, at some other point.

4. To protect a particularly important point, or to block a line of communication crossing the frontier.

As a general rule, it seems to be the intention to form the garrisons of these works eventually from second and third line organisations, but the mobilisation and concentration of these is, in nearly all cases, slower than that of the regular army, and during the first few days of a campaign, with which we are now dealing, such inferior formations will not be available in any large quantity, and the troops for the defence of the permanent works must be taken from those of the regular army which are ready first. It has been calculated that the French "strong places," on the 250 kilometres of the Franco-German frontier, require a garrison of 180,000 men.

Financial considerations do not allow of all of these permanent works being always kept in a state of complete readiness. Most of them must be mobilised to gain their full defensive power. Until ready, in order to resist a *coup de main*, they may require a garrison stronger than what will be wanted later. Their importance, real or imaginary, will demand their protection, and they will

thus attract to themselves a very large number of men, and these will necessarily be taken from the great frontier units which are first ready. They have thus an undoubted tendency to limit the number of troops which are available, during the first days of a war, for the mobile protective work.

Such works are very seldom on the actual frontier. The outworks of Metz, which is a very advanced fortress, are five or six miles from French territory, and it is very possible that the intention may be to push forward directly war begins, so as to gain a greater depth of zone. There will thus generally be room for the employment of frontier detachments, as a first line of protection and observation, and the absorbing tendency of the permanent works will hardly extend to the forces, which are so essential for these purposes. The permanent works will then constitute, wholly or partially, the prepared positions on which the frontier detachments must finally fall back and then stand to fight, till the great frontier units are ready to act. It is the whole action of the advanced guard army, consisting of the great frontier units, and which should be ready for efficient use in a very short time, which is so deeply influenced by these permanent works. They undoubtedly allow of the mobilisation and concentration of the great frontier units in a much more forward position than would be possible if they did not exist, for their peace garrisons are, or should be, quite sufficient to

secure them against any sudden and partial offensive of the enemy. They may in some places, such as Metz, permit of a strong force safely occupying a very forward position or bastion, so that by its influence or action it can flank the frontier protection on either side of it, thus materially adding to its strength. By blocking important lines of communication, they can assist in delaying an early and partial offensive on the part of the enemy on certain portions of the frontier. On the other hand, unless they are planned and sited with the greatest ability and forethought, and unless an army is thoroughly saturated with the determination to retain the power of mobility and manœuvre, they will have a magnetic attraction, they will tie the advanced guard army to the defence of fixed points, they will disperse it, and they will destroy its activity and offensive spirit.

Fortresses may be required to hold out for a very long time, even after the enemy has passed them in his advance. For this reason carefully calculated garrisons are allotted to them, but it is quite possible to use a portion of these at the beginning of the war for mobile frontier defence. The disadvantage is that, if such troops are detailed as frontier detachments, their zone of action is necessarily limited. They must always keep a line of retreat to the fortress, and their co-operation with neighbouring detachments is not free. The necessity of their falling back in one fixed direction may

expose other detachments to great danger. As the final garrisons of fortresses will usually consist to a great extent of second and third line organisations, the temporary garrisons of regular troops, which guard them at the beginning of a war, will, of course, regain full mobility and power of manoeuvre as soon as they are replaced.

There is generally very little chance of using large masses of cavalry along the front of a great concentration, for the rival forces are almost in touch with each other from the first day of the war. They are very thickly distributed, and are supported by many fortified positions. Should a gap exist in the enemy's dispositions, it is likely to prove a death trap to a cavalry mass which uses it to penetrate the front. There will often be a strong force of cavalry permanently stationed on the frontier, and this may be mobilised and ready for action very rapidly. A proportion will be required for the formation of the mixed frontier detachments, and this will be taken from the cavalry belonging to divisions or army corps, or in our organisations from the protective and divisional cavalry. The best sphere of action for the cavalry divisions, forming the army or "independent" cavalry, appears to lie on the flanks of the general concentration. When the length of frontier is small, in comparison with the forces employed, room for action on the flanks may not be available. For example, in the case of a war

between France and Germany, the cavalry masses will only obtain a wider fire for action if the neutrality of Luxemburg and Belgium is violated. On longer frontiers, such as that between Germany and Russia, cavalry masses would unquestionably have greater scope on the flanks, but the longer it takes to mobilise and concentrate them, the more likely are they to find themselves opposed by strong bodies of second and third line organisations, echeloned on the flanks of the main concentration. However, in a good many cases there may be a favourable field for early action, but the importance of the object must justify the risks, and an offensive across the frontier should only be undertaken by the express orders of the Commander-in-Chief.

If the "independent" cavalry is used to penetrate into an area occupied by hostile detachments, even though these are considerably scattered, it must not stay long in such a dangerous position, or it will be cut off or suffer greatly in effecting its retirement.

Favourable opportunities for cavalry raids will doubtless sometimes occur at this period, but a consideration of them is altogether outside the scope of this work.

There can be very little doubt that, during very large concentrations, which take place close to each other, the best and most comprehensive information will be that which is obtained by the

agency of a well organised secret service system, and the full use of a large number of flying machines, so as to supplement the knowledge, gained by an efficient intelligence department, of the details of the enemy's organisation and intentions.

The question of command in frontier protection is one of much difficulty, and will greatly depend on the distribution and proposed method of using the great units which are stationed next the frontier, and which, for clearness, we will assume to be army corps. If the enemy's mobilisation and concentration are more rapid than our own, the unsupported resistance of the frontier detachments may be insufficient to check him seriously, if he advances. Their action may have to be supported by those of the forces lying next behind them which are first ready to do so. Even when the enemy's preparations are not quicker, his early adoption of the offensive with a portion of his forces may have the same result. The frontier army corps may each be directly under the Commander-in-Chief, they may be organised into an advanced guard army under a specially appointed general, or they may individually form the advanced guards of armies being concentrated in rear of them. If they are so disposed that one occupies a shallow zone all along the portion of the frontier, behind which the main concentration of the forces takes place, while the others lie in rear of it, it is quite possible that the single army corps

in front may be sufficient to supply all, or at least the most important, and centrally situated, detachments, but, if the length of front is considerable, it will not be able to furnish any supports or reserves for them. These will have to be supplied by the army corps lying behind. Even if there is no serious advance of the enemy, the command of such a long thin line, from a central position, is extremely difficult. The corps commander has very little influence over the action of the detachments, and it will be hard to ensure their co-operation. The unit is almost hopelessly broken up. Any portion of our forces, which advances to or over the frontier, must either absorb the detachments on its front, or pass through, leaving them in rear. Thus, in a general offensive movement on our part, the whole of the army corps will be broken up or have to assemble and follow after the rest of the forces, although the frontier detachments have probably gained invaluable experience and knowledge of the ground and enemy, which is not possessed by the troops passing through them. If the enemy attacks in strength, the frontier detachments immediately concerned have to fall back, so as to gain support from troops belonging to another army corps. There is not only, at once, a most undesirable mixture of units, but the commander of the front army corps ceases to have any control over the detachments which have fallen back, or over the section of the frontier

they are protecting. He is deprived of a portion of his command at a critical moment, and the remainder may be divided into two separated portions.

On the other hand, the frontier army corps may be so disposed that they are side by side, each with its share of the frontier for which it furnishes detachments. The frontier detachments are thus divided up into groups according to the corps to which they belong, and it becomes a question as to whether the general of an army corps should deal with the detachments direct, or should detail a separate commander for his group. The duties which fall to the lot of an army corps commander, on the outbreak of war, are very strenuous, involving the preparation of his unit, as a whole, with the utmost rapidity, and its disposition in accordance with the ever changing situation. He must be ready to co-operate with other frontier army corps, and this may perhaps separate him from his group. He must always remain in close communication with the higher authorities, so that there may be no delay in the execution of orders. It seems almost impossible for him to devote the necessary attention to several frontier detachments, so as to ensure their mutual co-operation as well as joint action with neighbouring groups, nor can he lightly quit his headquarters, so as to be on the spot with the detachments. A commander for the group

would seem essential, but this again introduces certain difficulties. If the total strength of the group is more than one brigade, as it will generally be, a divisional general seems indicated, but it is to be remembered that he will be taken away from his mobilisation duties, for even the detachments will not be up to strength when the war commences. He will probably have to hand over the mobilisation work to a subordinate, who will remain at divisional headquarters, with what is left of the division after deducting the frontier detachments, and this body will act as a reserve to the detachments. It is evidently inexpedient to move it, if it can be avoided, till mobilisation is complete, although the detachments must take post at once, whether fully mobilised or not.

The frontier will be thus divided up into several groups of detachments, belonging to several army corps, each under a separate commander. A single commander for all the groups combined seems most inadvisable. To be efficient in war, the organisation should exist in peace. To all intents and purposes the frontier groups would thus constitute a separate corps, as in the first case considered, with the additional disadvantage that the organisation of all the frontier army corps would be destroyed.

Several methods of command for the groups are possible. They may be directly under :—

1. Their army corps commanders.

2. The commander of the advanced guard army.
3. The commanders of armies of which they will eventually form the van guard, or
4. The great headquarters.

There is generally no permanent peace organisation for the command of armies consisting of several corps, hence (2) and (3) are impossible during peace, and an alteration of arrangements must be made at the critical moment when war breaks out, the duties of the first protection of the frontier having to be taken over by one or more generals, who may know nothing about it. In case (2), if we regard the groups as the tactical advanced guards of army corps, they would naturally receive their orders from or through army corps commanders, and there seems no reason why this convenient rule should be put aside. The issue of orders direct to the groups from the advanced guard army commander constitutes them into a sort of general advanced guard to the advanced guard army, and they are evidently not suitable for this, as they emanate from different army corps, and form a cordon system, which is much too long to permit of their being really used as such. In the case of (3) the army corps to which the group belongs will be the advanced guard of the army in question, so that its group would naturally receive orders from or through the commander of the army corps, not from the army

commander direct, and there seems no object in adopting any other plan. Whether the frontier army corps are formed into a separate command, or each constitutes the advanced guard of a different army, the fact that the groups of detachments are accustomed to deal with the different army corps commanders, who may be assumed to be thoroughly acquainted with the frontier, and the views of the great headquarters on the subject of protection, must be regarded as a great advantage, even when, on the outbreak of war, a new link is introduced into the chain of command. There undoubtedly comes a time when, with the development of the situation, the army commander must take over a portion of the frontier protection, but he certainly will rarely be able to do so during the first few days of the war, while mobilising and concentrating.

It would appear inexpedient for the great headquarters to attempt to deal direct with the commanders of groups. As soon as action of at all a serious nature commences, whether offensive or defensive, the groups must, in the great majority of cases, become amalgamated as regards command with the frontier army corps which supply them, and the system has to be altered. To deprive the frontier army corps commanders of the opportunity of thoroughly studying in peace the problems which they will be called on to solve in war, would be a serious mistake.

The whole question is one that must depend on the plan of campaign, but in most cases it would appear desirable to place the groups under the frontier army corps commanders, who should correspond direct with the great headquarters, even after war has commenced, until any high commander is really in a position, from the development of the situation, to relieve headquarters of the task. It is not to be denied that such a system may give rise to an inclination on the part of group commanders to act more for their own army corps than for the forces as a whole. This can only be rectified by ensuring that a proper class of officer is selected for the task, and that he is entrusted with a full knowledge of the frontier conditions.

The efficiency of frontier defence will greatly depend on the clearness of the instructions issued to the commanders of groups and detachments. There is no doubt that in this matter they should be in a more favourable position than the leaders of ordinary protective bodies, the instructions to whom are often hurried, and apply to ground which is little known, and to a situation which is very vague.

Frontier protective bodies should also be at a great advantage as regards means of intercommunication, which can and should be highly developed during peace time.

Those who desire to study the whole question

of such protection at greater length are referred to the following works :—

General Verdy du Vernois—*Studien über den Krieg*, Part I of which deals with the German frontier protection from July 15th to August 2nd, 1870.

Lt.-Colonel Dumas—*Des Manœuvres de Couverture*.

Lt.-Colonel de Féraudy—*Etude sur la Couverture*, an article which appeared in the *Revue militaire générale* in July, 1908.

Chapter XVIII.

THE INDEPENDENT CAVALRY DOCTRINE.

THE doctrine of the army, strategical or independent cavalry is that the maximum amount of that arm, after providing as sparingly as possible for protective and intercommunication duties, is pushed forward in front of the army with the primary* object of exploration, that is, to seek out the enemy and gain every possible information concerning him. The greatest strength is collected and kept massed† for the purpose of using force to gain the primary object. Serious opposition has to be overcome by this force, and there is always the chance of its being defeated. This application of force cannot be made all along the enemy's front.

* The secondary objects are :

1. To engage and defeat any similar hostile body.
This is generally merely an incident in carrying out its primary object.
2. To make raids.
This really lies outside the scope of the present work.
3. To seize strategic points.
If strategic points are seized, it is to be presumed that there is a good prospect of holding them till assistance arrives. This is then an ordinary protective measure.

† This does not necessarily mean that the entire cavalry should be on a single road, but that it should be so arranged that it can be most readily used as one force.

Time, space and strength do not permit. When not applied, information is sought by reconnoitring patrols, backed by reconnoitring squadrons. Thus the two methods of obtaining information, namely by force and stealth, are used simultaneously.

We will suppose that the enemy does not like this doctrine, and keeps back the great mass of his cavalry. He expects to gain his information by stealth, as far as cavalry is concerned. Our cavalry mass leader can thus advance up to the hostile screen with practically no opposition.* The forward movement of such a mass cannot be kept a secret, if the enemy takes the most ordinary precautions, and especially when he uses flying machines. Its point of application will be approximately foreseen, and it is most unlikely that it will come as a complete surprise. Assuming that it is not previously stopped, it tears a rent in the hostile screen, and penetrates, leaving some of its strength to keep open the gap. Its reconnoitring patrols can then push forward in the direction of the enemy's principal columns. The cavalry mass will not be left alone, within the screen; it will be rapidly assailed by the ordinary mixed protective detachments, groups specially formed for the purpose, and a cavalry force, which need not be inferior to itself in strength, and will probably be a

* This is only true if we are acting in our own country. If in hostile territory, there will often be a somewhat unorganised, but all the same a substantial, resistance from the enemy's irregular troops, such as the Landsturm.

good deal fresher. Every moment it remains, the superiority against it increases. If it remains long enough, it is certain to be overpowered. It cannot retreat at once, as it has to keep the gap open for the return of its reconnoitring patrols, and these cannot gain information of any value in a very short time. The further the cavalry mass penetrates, the more critical its position becomes. The very strength of the cavalry mass indicates a serious effort and therefore a serious combat, and it is difficult to see how it can emerge from this without considerable damage. The breaking off of a cavalry engagement is a difficult task. The gaining of some information is not likely to appeal greatly to the rank and file, and compensate in their minds for an even partial defeat and retreat, and there will most likely be a considerable loss of *moral*. Its action constitutes a separate application of force in a strategical sense, that is, its combat is completed before the rest of its army arrives to assist it.

“ In strategy it cannot be an object to make time an ally on its own account by bringing troops successively into action. . . . The rule which we have been seeking to set forth is therefore, that all forces which are available and destined for a strategic object should be *simultaneously* applied to it : and this application will be so much the more complete, the more everything is compressed

into one act and into one movement."—(Von Clausewitz. Book III. Ch. XII).

It is evident that the advantages gained must justify the violation of one of the most fundamental principles in war. These advantages are as follows :—

1. If operating in our own territory, the advance of the cavalry will tend to preserve more of it temporarily for our own use. If in hostile territory, it will tend towards allowing us to exploit more of it for requisitions, etc.
2. A certain amount of delay and disarrangement of the enemy's forces will be caused by our cavalry mass, but, owing to the distance intervening between the main bodies, the effect will have worn off before contact takes place.
3. Information is gained. The first two are merely the result of the search for the third. They are both temporary and local and not of very great importance. The third requires further consideration.

The information gained by force is only a portion of that secured by the cavalry, but the proximity of the mass may possibly engender a greater dash in the leading of the reconnoitring patrols which have to act by stealth. If both sides are advancing, it is clear that very little time will be available, and it is very doubtful if a real application of force

can take place at more than one point, for it must be remembered that the cavalry mass may be imperatively required to assist the general advance guard, and that it has eventually to clear away from the front before the main forces come into collision. When only one side is advancing, there will be more time available, but it does not seem very likely that the cavalry mass, having once exerted its force and, consequently, received the inevitable check, will be very anxious to try the same procedure over again, at a very short interval of time.

If the enemy is employing a general advanced guard, our cavalry mass has the choice of using its force to reconnoitre that body, or to pass by it to reconnoitre a portion of the main body. The former is undoubtedly the safer, but the constitution of a general advanced guard is very substantial. It has its own protective guards, and the enemy's cavalry is probably concentrated near it. The two co-operating are likely to give the cavalry mass a very warm reception. But the reconnaissance of the general advanced guard is, after all, a secondary matter compared with that of the main body. If the cavalry mass goes past the general advanced guard, it at once exposes its flank and rear to attack. It has a long way to march, under these unfavourable conditions, in order to reach the main body. It cannot hope to do so undetected. The hostile cavalry can keep

pace with it, so as to co-operate with the screen and the tactical advanced guards, which directly protect the main body, at the point where force will be applied. The conditions are certainly not favourable to success.

If the enemy has only tactical advanced guards, he will probably keep his cavalry mass near the screen in a more or less central position, moving it to one side or the other in accordance with the information he receives of the advance of our cavalry mass. It is not likely to be long before this hostile cavalry arrives at the point at which our cavalry mass makes its effort. There will doubtless be very little difficulty in pushing aside the protective cavalry, it is the strength which lies behind which is dangerous to the cavalry mass. It is not likely that it will choose its point of attack immediately in front of one of the tactical advanced guards. An infantry brigade, with thirty-six guns, constitutes a very awkward force for even a very large cavalry mass to tackle, especially when assistance from cavalry and infantry is close at hand. It may choose an interval between two columns. Even if these are ten miles apart, it will take very little time to bring artillery to bear on it from two advanced guards, with a total of seventy-two guns. This applies to an open country, for the cavalry mass is not likely to select a close one if it can possibly be avoided. The infantry of both advanced guards can be in position

to open fire on the intruder within a couple of hours, even if no previous precautionary measures have been taken. Equally if the hostile cavalry mass does not arrive quickly, the position of the cavalry mass in its endeavours to penetrate is not enviable, but we will suppose it braves all these dangers. Directly it has made a gap in the protective cavalry screen, it sends forward reconnoitring patrols. It is very improbable that these will be able to move far to a flank; they will be restricted to the space between two hostile columns. Even when the enemy is advancing, these patrols may have to go some ten miles before they come in contact with the heads of columns. But it is not sufficient to look at the heads of columns only, a substantial portion of the columns at least must be observed. Then the patrols have to get back. This work will take many hours, even if unopposed, but the enemy are certain to be thoroughly on the alert, for the very approach of the cavalry mass will give away its intention. It is probable that the enemy, in addition to ordinary local protection, will improvise a reserve line of protection to stop the reconnoitring patrols. It seems almost impossible for the cavalry mass to hold out in its perilous position for the necessary time. It will probably be driven to retreat through the gap, if still open, leaving the reconnoitring patrols to make their way back by stealth. Their entry has been made easier, but their exit possibly

more difficult, unless they confine themselves to the most superficial reconnaissance. It is quite possible that some of these patrols may be able to get back, but there is no particular reason why their information should be better than that of those patrols which succeed in penetrating by stealth, and history and experience teach us that it is impossible to maintain a screen, especially on the move, which cannot be got through in some places by cleverly led patrols. It does not seem unreasonable to maintain that the extra information, gained by such a use of force, is not very great. Many writers, who are supporters of the independent cavalry doctrine, admit that the information procured by cavalry will only refer to the fringe or contour of the hostile forces.

If the only information obtainable was that emanating from the use of cavalry, even a small increase in its amount might be considered of very great importance, but this is by no means the case. Modern inventions, such as the telegraph and motor vehicles of all sorts, have greatly increased the scope of secret agency (*vide* Chapter xiii), during the actual operations. The reconnoitring powers of aeroplanes and other flying machines are very great indeed; there are doubtless certain limitations to their use, but these are being constantly eliminated. It would be wrong to maintain that cavalry reconnaissance has therefore become useless, but its importance has been

lowered. It has also become harder than it was formerly, owing to smokeless powder, the longer range of weapons, the power of artillery to fire from covered positions, and the adoption of uniform tending to render the soldier invisible. Hence, a slightly enhanced result in a portion of the reconnaissance carried out by cavalry is of less importance than it formerly was, and the employment of an isolated cavalry mass to obtain it seems less justifiable. If a sacrifice of our cavalry, to gain information by force, is really necessary, it would appear that it would be of more value to us when the enemy is comparatively close, and his dispositions are more fixed.

Most soldiers will agree that, in addition to its use as an agent to reconnoitre by force, cavalry is still a most valuable arm for employment for other purposes. Reconnaissance by stealth, whether before or during the battle, will always afford a wide field for its energies. The importance of raids has grown with increase in numbers, and the delicacy of means of communication by which they are supplied. They may occasionally offer the extraordinary advantages which justify a separate application of force in a strategical sense. The use of cavalry during a battle is by no means an impossibility, as some would maintain. As a quickly moving reserve of force it may prove invaluable, and there are local crises during which the employment of cavalry shock tactics may lead

to great results. It can be used to guard the flanks of a line of battle and, if it cannot stop a great enveloping movement, it can at least delay it. But it is at and after the great crisis of a battle, when cavalry, using both mounted and dismounted action, will be able to perform its greatest exploits and a glorious rôle awaits it. We cannot regard all these uses of cavalry as secondary in importance to the obtaining of early information by force. There seem to be very good reasons why we should not use up its energies prematurely, and wear it out both physically and morally on a task which promises such poor results and such great risks. We have only to examine its action to see that this wear and tear is very real. It has to gain a long distance in front of its own army, to penetrate the enemy's screen, to fight a severe engagement against great odds, to escape again through the screen, and then to march, possibly many miles, to gain a flank, so that it may avoid being crushed between the two main bodies. During all this time it has to secure itself when at rest, sometimes by an extensive system of protection, which is particularly harassing to cavalry soldiers and horses. If it falls back to avoid the excessive protection duty, it will have to march many miles more.

That the maximum effect is produced by a true co-operation of all arms, is no empty expression. That of infantry, artillery, and engineers is now-

a-days nearly universally practised. Is cavalry, on account of its extra mobility, to escape the law? Even now we are in a position to employ troops with a great variety of degrees of mobility. Men in aeroplanes, in motors, and on bicycles, and cavalry, artillery and infantry, can all move at different speeds. Are we therefore going to apply the independent cavalry doctrine to all of these, and have different combats with each of them in turn and finally a battle in which all the remnants, which survive from the preliminary encounters, can take part? It is surely better to fight one great battle in which all arms, at their highest pitch of efficiency, whatever their mobility, may co-operate with each other.

According to the independent cavalry doctrine both sides send forward their cavalry masses, with the same mission of exploration by force. If these two bodies avoid each other, as it is sometimes admitted, in a half-hearted manner, that they may, there is certainly a better chance of their obtaining information by force, as in doing so they will only be opposed by troops the majority of which are less mobile. In most cases the gain will be nearly equal, and there does not seem much advantage in adopting such a policy. It is, however, conceivable that information gained in this manner may be more valuable to one side than to the other, or that the reconnaissance by force of one side may be more difficult than that of the

other, owing to position, for example, when the other side is acting on the defensive, and its screen is particularly effective from the existence of some obstacle, such as a river running along the front.

In the great majority of cases the two cavalry masses will meet, and a separate combat take place for supremacy. The victorious side will drive back the adversary, and proceed to the reconnaissance by force, but the beaten cavalry cannot be regarded as a negligible quantity, and though it will doubtless have to seek refuge behind other troops, it will reform there and, in co-operation with them, assist in repelling the reconnaissance by force of its rival, which will still remain a difficult and, comparatively speaking, unproductive task. The high probability that this separate cavalry combat will take place appears to be a very strong reason why the side, which possesses the weaker cavalry, should not send it forward on the strategical mission of gaining information by force. An initial reverse may have a most disastrous effect on the *moral* of the army as a whole, besides depriving it of a very considerable portion of the services which its cavalry could render it in battle. The only method of obtaining the full value from an arm, in which we are inferior, is to make it co-operate with other arms. The superior cavalry will gain much for its side by its victory. If we are sure of gaining the day in such a separate application of force, and the

enemy is weak enough to give us the opportunity, we would be foolish not to avail ourselves of it. But it appears most inexpedient, after such a victory, deliberately to throw away its advantages by making a second separate application of force to gain information, when the odds are all against us.

If the chances in a preliminary cavalry duel are not very distinctly in our favour, we make a mistake in entrusting to our cavalry a part of the whole result which is out of proportion to the importance of the separate force engaged. The defeat of our cavalry does not only mean the loss of so many men and horses, but it lowers the *moral* of the command in every grade, and decreases the value of our other forces for subsequent use.

There is an evident anxiety on this point in the minds of many advocates of the independent cavalry doctrine, and expedients are suggested for minimising the risks involved. Perhaps this is particularly noticeable in the case of the French, who may have to contend against a cavalry which is at any rate superior in numbers. Cyclist detachments, bodies of infantry carried in wagons or motors, or made extremely mobile by lightening the loads carried on the men's backs, and the celebrated *détachements mixtes* of the latest French school, are all suggested as methods of stiffening the cavalry mass. As it is evidently

open to both sides to adopt such measures, there is no likelihood that they will ensure a high probability of success to either side in the separate application of force. The only result would seem to be that the separate application of force will become a somewhat more serious matter, and therefore more objectionable. If the addition of such bodies to the cavalry mass is to be regarded as an endeavour to merge the engagement, resulting from the action of that mass, into the general battle of the main body, so that it may not be a separate affair, but merely the introduction to the battle, we are at once brought back to the idea of the general advanced guard, but one of a peculiarly weak description. Cavalry does not possess that tenacity in resistance, which would qualify it to form the principal portion of a force destined to become a pivot of manœuvre for the main body. These additions hamper the mobility of the cavalry mass in a separate application of force, but are not strong enough to connect its action with that of the main body, thus forming a tactical whole. For this we require such an amount of stiffening that the added force becomes a regular general advanced guard.

Let us then attach the cavalry mass to our general advanced guard. Both together will form the agent for obtaining information by force, but this agent will be so powerful that its engagements can continue till the intervention of the main

body. In addition to the employment of secret service and flying machines, earlier information will be gained by stealth by strategic reconnoitring patrols, to which squadrons, or occasionally regiments, will act as reservoirs of supply. These will form the antennæ of the general advanced guard, which will also have its protective cavalry screen. According to the situation and the character of the country, the cavalry mass will be in front, rear, or flank of the general advanced guard. It need not be glued to that body. If some point of importance has to be seized in front or flank, it can move out rapidly to do so, confident in the early arrival of support. It can sally forth to strike when its stroke is really required, either against the cavalry or other forces of the enemy. It must assist the general advanced guard to gain information, time, and space, in conformity with the leader's general plan. It can operate on the flanks of the general advanced guard, extending its zone of action, and averting the wide turning movements that the enemy will have to undertake to overcome that body, while the main body of the forces is manœuvring. It can always act thus with confidence, for it is in tactical connection with the general advanced guard, and immediate support is forthcoming. This constitutes a true co-operation of arms. Should it be necessary, it is available for despatch on any mission outside the tactical sphere of influence of the general

advanced guard, either before or during the battle.

There is nothing in this method of employment of the cavalry mass which should in any way militate against the offensive spirit in which cavalry should be used, though its objectionable "independence" is kept within bounds. A cavalry inferior in strength to that of the adversary is made capable of far more energetic action than when employed according to the independent cavalry doctrine.

This appears to have been Napoleon's general conception of how cavalry should be used, and it would seem that modern improvements and inventions, far from tending to make a complete change necessary, have confirmed its advantages in nearly every way.

There are fashions in the methods of waging war which gain an enormous hold over soldiers, and for a time it appears impossible to act otherwise, but in the end there arises some great leader who does not mind being unfashionable. He wins great battles in a different manner, the fashion changes, and we cannot understand how anyone could have followed the old one.

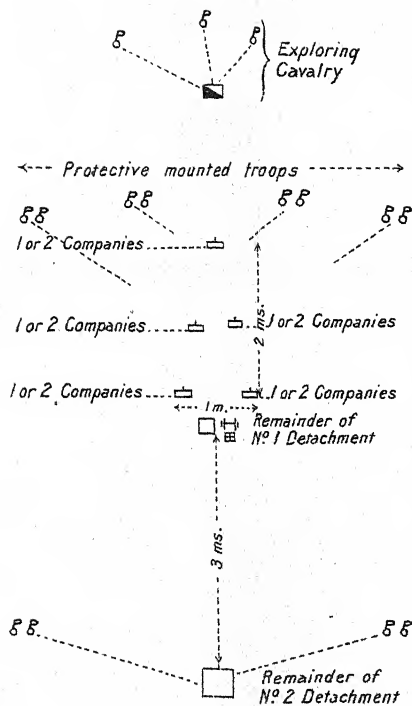
The independent cavalry doctrine can hardly be said to have its foundation in actual war experience. At a time when cavalry was relatively superior in strength and its action was certainly not less powerful when compared with that of the

other arms, than it is at present, such a use of this arm was, to say the least, very exceptional and limited in scope. Napoleon, the greatest military expert of modern times, and the possessor of a powerful cavalry, seldom used this arm in this manner, though he certainly had most favourable opportunities of doing so. Von Clausewitz, one of the most profound military thinkers, does not give the matter serious attention. The doctrine may be said to be the result of the Franco-German War of 1870-71, but even here the proof of its efficiency is far from convincing, as the Germans did not employ it, to any marked extent, until they had put out of action nearly all the organised French forces. In Manchuria we find an army, almost destitute of cavalry, gaining an uninterrupted series of victories over a rival particularly strong in this arm, though it was avowedly badly used. It was not in the events leading up to battle when the Japanese wanted cavalry but after the crisis, so as to confirm their victories.

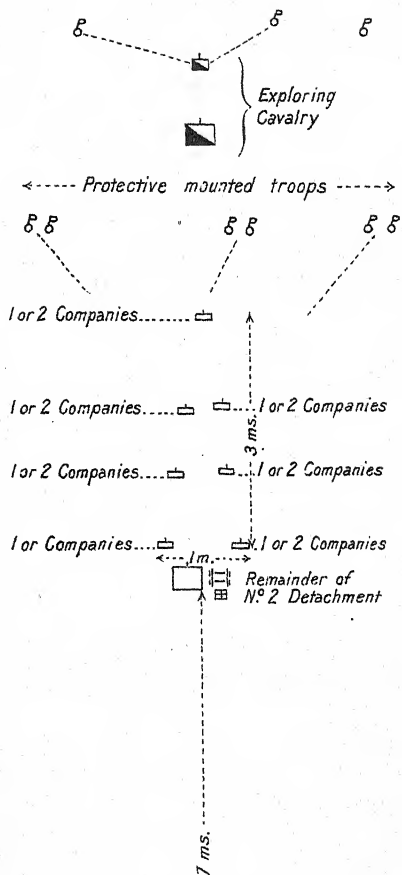
The doctrine, however fascinating, may be regarded as at least theoretical. The great wars of the past have been gained without its employment, and there seems to be nothing in the improvements in military weapons, or in the other great changes which have occurred, to prove that its adoption is essential for all armies. To question its infallibility therefore is justifiable, and to do so, is in no way to call in question the value of cavalry.

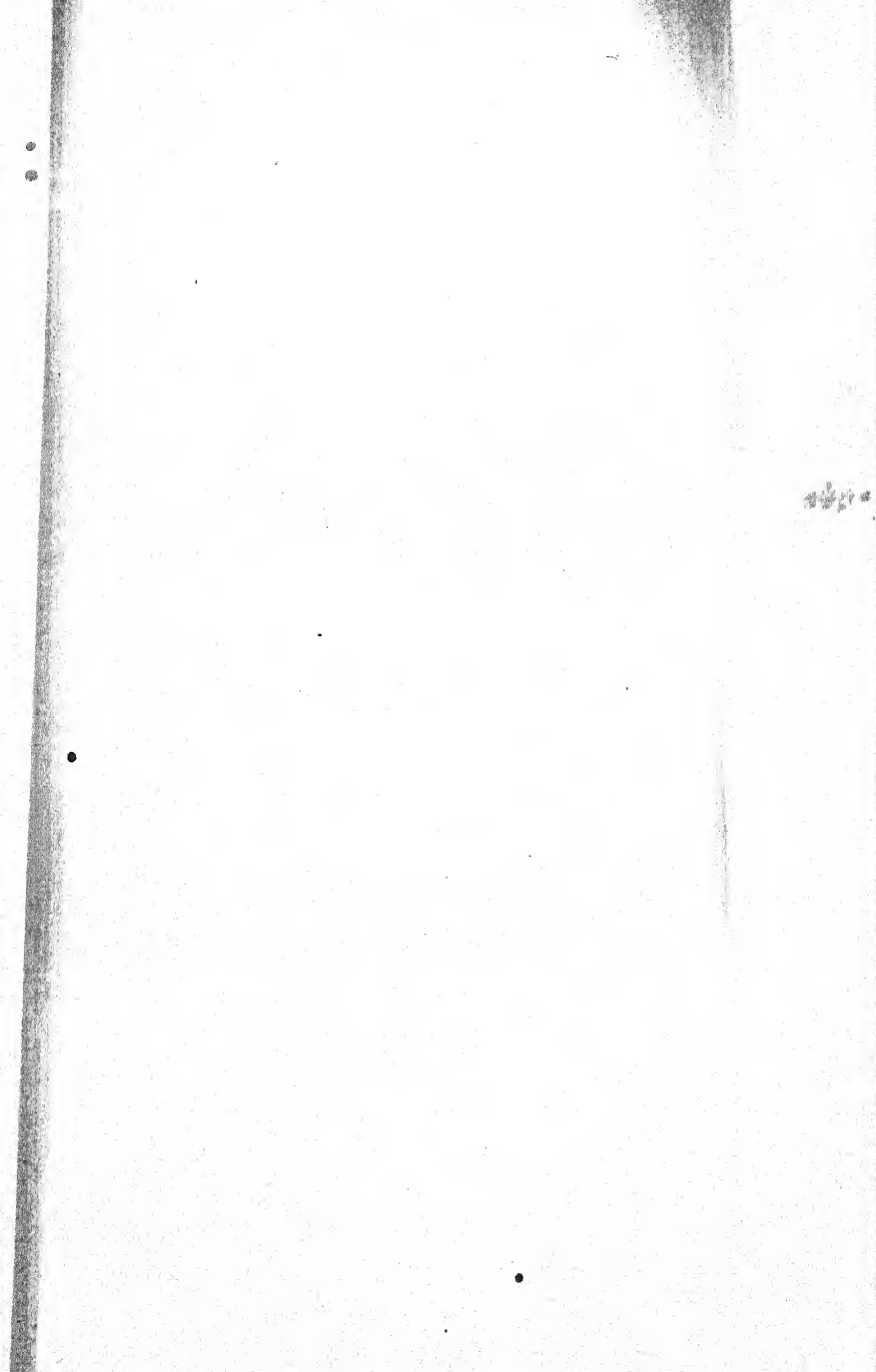
Apart from the gaining of information by force, it is very doubtful if the formation of exaggerated masses of cavalry is not being carried to an excess. It is quite conceivable that the bulk of the cavalry of a single army, of say three army corps, should be massed into one or two divisions, but when we collect together the cavalry of a group of armies, or of the entire forces in the field, the limit seems to have been passed. The resulting cavalry mass is terribly unwieldy, and its mobility must suffer, its supply arrangements are almost impossible, and it can only be used at a single point, whether cavalry is really wanted there or not. A true co-operation with the other arms seems to be out of the question. A great modern battle is by no means a homogeneous whole, it is divided up into compartments, in any of which favourable opportunities may occur for the use of cavalry masses of a reasonable size.

PLAN 9.



PLAN 10.





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Chapter XIX.

IRREGULAR PROTECTION.

A FORM of warfare in which the British army has frequently to engage, and which is therefore of particular interest to us, is that which we have to employ against the tribesmen on the north-west frontier of India. Its protective methods are founded on the same principles as those we have already examined, but they form such an extreme type, that a description of them may not be considered superfluous.

The country is very rugged and mountainous, and generally destitute of roads, in the ordinary sense of the word. The paths, till improved by the troops engaged, are frequently impassable to camels, and often even to mules. Except where the valleys occasionally broaden out, the troops may be said to move constantly in defiles, which are often of a most forbidding nature, and in which a few determined men can successfully delay far superior numbers. Good camping grounds are rare and limited in extent. All supplies are extremely scarce. The crops, such as they are, get quickly eaten up, and even camel grazing must

soon be sought for far afield. Nearly everything the troops require must be carried on pack transport, which makes the baggage columns enormously long and therefore vulnerable. In the southern portions of the frontier water is often scarce and bad. To the north there are many unfordable rivers and torrents, which have to be bridged under great difficulties, and which sometimes afford the tribesmen safe and excellent opportunities for harassing a column marching along one side of them. The climatic conditions vary to an extraordinary extent, from the most intense heat, in the lower valleys, to the bitterest cold, at high elevations. The difference of temperature between day and night is often extremely trying.

The tribesmen are magnificent mountaineers, inured to hardship, undisciplined but brave, sometimes to a fanatical extent. They are mostly well armed with rifles, good shots, and do not waste their ammunition. They often show great courage in attacking with the sword, especially at night. They have no artillery. Their favourite method of warfare is to harass our columns by individual men or small parties at every weak spot, especially in flank and rear. Camps and columns are constantly sniped. Small parties and stragglers are cut up. When the attraction is great, a number of parties will co-operate in the attack. When we endeavour to retaliate, they scatter in the moun-

tains, to reappear again at some other spot. Every goat track is known to them. They give no quarter and expect none. They are very democratic, and do not readily submit themselves to any form of superior command. Occasionally some leader, nearly always a religious one, gains sufficient power to persuade them to act in masses, and then we may expect really serious attacks by day and night, but the difficulty for us generally is to find something substantial to fight, and, when we do find it, we should make the most of it. Reconnaissance, except by force, is excessively dangerous, and there is usually an extraordinary uncertainty of what will happen next, or where our principal danger lies.

These conditions have led to the organisation of mixed brigades of which the following is a type :

- 1 or 2 Squadrons of Indian cavalry.
- 1 or 2 Mountain batteries, British or Indian.
- 1 Company Indian sappers and miners.
- 4 Battalions infantry, 1 or 2 British,
3 or 2 Indian (including 1 Pioneer battalion).
- $\frac{1}{2}$ to 1 British field hospital.
- 1 to $1\frac{1}{2}$ Indian field hospitals.
- 1 Brigade ammunition column.
- 1 Brigade supply column.

This comes to about 4,000 fighting men, 2,500 followers, 1,700 horses, mules and ponies, and

1,200 camels. Theoretically, such a column should not be more than five or six miles long, but, where the road is bad, it may extend to double that distance.

A column, when advancing, requires an advanced guard, a rear guard and, in nearly all cases, protection on both flanks throughout its entire length. The advanced guard has to brush aside minor opposition in front, the process of picqueting the flanks has to be carried out, the road has to be improved, the picquets have to close in on the rear guard, and the rear guard has frequently to carry on a running fight, especially as the evening comes on. Even when there is no serious opposition, we are very fortunate if the advanced guard can move at two miles an hour. If we start at 8 a.m., for an eight miles' march, we are lucky when the rear guard arrives safely in camp at 5 or 6 p.m. Hence, it is most inadvisable, unless the road is exceptionally good, to try to move more than one brigade along it on one day, even for a short march. If it is essential to have two brigades at one spot, at a certain time, the ways to do it are :—

1. To move by different routes.
2. If this is not feasible, to make the men and necessary animals carry their own food for two or three days, and to move all transport, not absolutely required with the fighting line, the next day or days, under suitable escort.

If an attempt is made to force more men and animals on to a road than it can really accommodate, the result is almost hopeless blocks, men without food or shelter, a broken down transport, and, in the end a greater delay than if the force had moved in a rational way with shorter columns.

Flank protection is so exacting in its demands, and so deeply influences the value of the whole column as a fighting machine, that it is necessary to consider it fully before we are in a position to take up the question of advanced and rear guards.

The route, by which the column advances is nearly invariably commanded by the heights on both flanks, though occasionally only on one. A series of small flanking parties, or picquets, is detached from the foremost troops, so as to occupy suitable positions on these heights, or sometimes on lower ground, so that the enemy cannot fire at the column from them, or otherwise attack it in flank. They remain in position while the entire column is defiling past them, and finally join the rear guard.

There are two methods of supplying the picquets :—

1. We may attach a special body of troops to the advanced guard for the purpose. This may consist of a different unit to that furnishing the advanced guard. When this special picqueting body is used up, it is replaced by troops from the main body.

2. We may gradually use up the whole of the advanced guard, replacing the men on picquet by others from the main body, till we have an entirely new advanced guard.

In the first method, the advanced guard remains a permanent body, and its duties will be performed better than with a constantly changing force. As the picqueting troops are extra to its necessary strength, it has no chance of becoming too weak at a critical moment. The officer commanding the special picqueting troops does all the picqueting work, though the commander of the advanced guard has a right to interfere if necessary. The ordinary duties of the advanced guard are quite enough for one man to look after.

In the second method, the advanced guard duties must suffer from continued change of troops. The commander of the advanced guard is given more work to do than is consistent with efficiency. As he is generally the commanding officer of the battalion supplying the advanced guard, a very serious difficulty, as regards command, may be brought about when the first battalion is used up, and another takes its place.

In practice the first method will nearly invariably be found to be superior in every way to the second.

Both methods have the same disadvantage, namely, that, when the march is long and picqueting heavy, nearly the whole force may become

broken up, and units terribly scattered and dis-integrated. The only difference is that, in the first method, the advanced and rear guards will remain constant, while, in the second, only the rear guard is unchanged. Unless care is taken, the whole force may become a huge baggage guard, incapable of immediate and strong offensive action, and unable to resist any serious hostile attack at a particular point. The leader must consider seriously how this is to be avoided, and how he can best maintain a disposition in readiness for all eventualities. Units once detached for picqueting cannot again catch up the main body till camp is reached, unless the leader halts the column, closes up, and waits for a portion of them, but this, on a twelve miles' march, with a column eight miles long, means a delay of four hours or more, which would make it impossible for the rear guard to reach camp before it is dark. It is evident that the leader must either keep the picqueting troops within a certain limit, or be prepared to sacrifice his striking power.

For example, with an ordinary mixed brigade the leader places half a battalion as advanced guard, and half a battalion as rear guard. He therefore has three battalions left. If the tactical conditions necessitate his keeping two battalions in hand with the main body, one battalion must be able to picquet the whole route. If it cannot do so, it is clear that too long a march is being at-

tempted. If the march is an obligatory one, such as from water to water, the leader must make up his mind whether weak picqueting or an insufficient striking force is least likely to lead to a possible disaster. If the march is not an obligatory one, he should arrange the length of march so that both picqueting and striking force are sufficient, or, if the action of the enemy makes necessary the employment of more picqueting troops than he expected, he must shorten his march. When the enemy is active, and any considerable body is likely to be encountered, it is very risky to undertake a march of over eight miles, if the column is eight miles long.

Those responsible for picqueting will have a natural tendency to over-picquet, regardless of the weakening of the striking force. It must be impressed on them that the picqueting must be carried out with a certain unit or units, and if, as the march goes on, they find that they are likely to exceed this, the leader must at once be informed. He may then decide to shorten the march, if this is possible, or, if it is not, he must make his choice between the two evils of weak picquets or weak striking force.

If it is desirable to keep a striking force of two battalions, the disposition of the brigade can be arranged in various ways. Plans 11 and 12 give examples. In the first case, when the special picqueting force of half No. II battalion is used up,

its place is taken by the other half of the same battalion, which moves forward as required from the main body. Half No. I, No. III and half No. IV battalions remain with the main body as a striking force. In the second case, when the special picqueting force of half No. II battalion is used up, its place is taken by the other half of the same battalion. Nos. III and IV battalions form the striking force.

The battalion, which supplies the advanced guard, cannot also supply the picquets, unless the march is very short, or the enemy very inactive. In the case of a very small force, say of two battalions with not much baggage, it may be advantageous to carry out advanced guard, rear guard and picqueting duties with one battalion, leaving the other battalion intact. Here, if the rear guard commander wants assistance, and retains the picquets as they fall in, he will get men of his own unit. It is very probable that the picquets, after joining the rear guard, will have to be sent on to the advanced guard, so as to picquet over again.

It is evidently essential to economise picquets, as much as possible, by keeping the column well closed up. Whenever there is a check in front, for road-making or any other cause, the troops and transport in rear must close up to the greatest extent of which the ground allows. Even on the worst roads, there are some open spaces, and, during checks, troops and transport must assemble

on these in the closest formations. By this means sometimes three or four miles of picquets can be brought in to the rear guard, and, if necessary, sent to the front again.

It is a great mistake to imagine that the foot soldier is the only man who can be employed for picqueting. Cavalry and mounted infantry are most valuable for this purpose, and, in some cases, better than infantry. It is wonderful what bad country a good cavalry unit, which is accustomed to frontier work, can get over. There are generally places where the valley is less confined, and the mountains are not quite so precipitous as elsewhere. Here there may be commanding ground, one thousand yards or more from the road, from which the column can be sniped. In such cases there are often admirable opportunities for employing mounted troops. They save the infantry great fatigue, and their posting and withdrawal are carried out with the minimum of delay for the column. Tribesmen, as a rule, have a particular objection to the cavalry man, especially when he is armed with the lance.

The actual dispositions of the special picqueting troops, when still with the advanced guard, should be left to the commander of that body. Normally he would place most of them in rear of the main guard, only sending a company at a time to the van guard for picqueting purposes. When the picqueting troops with the advanced guard are

running low, the leader should be informed, so that more may be sent up from the main body. The picqueting reserve should not be quite at the head of the main body, as it might delay the artillery coming into action, or, if suddenly removed, might expose the guns too much. It may conveniently come directly after the artillery. The slight delays, caused by sending on picqueting reinforcements, are of no consequence, as the advanced guard nearly invariably has a tendency to move too quickly.

It has been said that the points that must be held by picquets suggest themselves to the picqueting officers with tolerable clearness. This is very far from the truth. If he knows the country well, it may be simple. If he has a perfect large scale map, it is possibly simple. If the hills are nice little round ones, at nice intervals, and with nice slopes, all going the right way, such as are generally given in books on the subject, it is very simple. Unfortunately we generally find none of these things. Great impassable cliffs overhang the road. We cannot get up them, but the enemy knows of paths he can use to do so. Rocky ridge rises above rocky ridge, and peak above peak, ever luring us on to go farther and farther. Things look quite differently from the bottom of a valley, and the top of a neighbouring hill. We find gorges on either flank, down which the enemy can rush on our transport, or on the flank of the rear

guard, but we do not know what to do with them. Picqueting is really a very difficult task, and nothing but practice, and a good eye for country, will teach us to be efficient in this important duty. The attached plans give a few examples of what may be expected :—

Plan 13 shows an actual frontier defile. Owing to the winding nature of the valley, it is almost impossible to avoid placing the picquets badly, unless we know the ground. Most of the picquets first posted will prove quite useless. Their correct positions are given approximately.

Plan 14 shows a river bed, some one-hundred yards wide, which is quite good going, but on either flank are great precipitous cliffs 1,000 to 1,500 feet high. Narrow gorges join the main pass every quarter of a mile or less, and are just as precipitous. It would take a man, not knowing the place perfectly, many hours, perhaps days, to find a path up on to the heights. Probably the best course would be to pass through at night, with no picquets. If it is necessary to negotiate it by day, apparently the best method would be to employ no picquets, but to place groups, at intervals, on either side of the river bed to fire constantly at places on the tops of the opposite cliffs from which sniping was taking place. If picquets tried to get up the cliffs, the few which succeeded would certainly never return.

Plan 15 shows the formation of a frontier gorge.

As the column advances, a series of unscalable cliffs faces it, but the reverse slopes are comparatively easy. Here, by running the gauntlet, picquets could be pushed ahead of the advanced guard, get up the reverse slopes where the cliffs are low, and then work backwards towards the advanced guard, till the heights overlooking the gorge were occupied. It is, however, easier to imagine than describe the feelings of the men of a picquet when they are storming one set of heights and are being fired into in rear from the next set of heights.

We are rather apt to regard the tops of hills as the only places for picquets, but side valleys and ravines are also particularly dangerous spots, and they must be picqueted also. It is most difficult to do so without exposing the picquets to plunging fire from above. We should try and find some high ground, within easy range, which overlooks the point of access to the flank of the column, but this frequently does not exist.

We must be on our guard not to try and do too much in the picqueting line. Some risks must be run. If we endeavour to picquet every height, even within one thousand yards of the road, the process will take so long that the column will make no progress, and all the striking force will be used up. The tribesmen are not fond of expending their valuable ammunition at extreme ranges, and, even if one or two men or animals are hit, it

is better than having picquets, which are far out, cut off and butchered.

Whoever is in command of a picquet must be given a certain amount of latitude as regards its exact position, as ground is very deceptive when seen from the bottom of a valley.

It is impossible to say what the strength of a picquet should be, except on the spot, and even then it is extremely difficult. The question is greatly influenced by the length of the march and of the column, and the number of troops available for picqueting. A picquet, which is a long way from the road, should be strong, but one, which is close to it and can be quickly reinforced from the column, may be very weak. The enemy may have been seen in certain directions which may render an attack probable at some points, and these should be strongly picqueted. The massiveness of the feature occupied often requires a strong picquet. Our regulations suggest from four to twenty-five men. They may often have to be stronger. Even a whole company may occasionally be necessary. Four men is nearly always too few, as it does not allow of the ordinary precautions, such as looking for a way down, and posting a file on the road, but such a picquet might be used to connect up a larger picquet beyond, which is out of sight of the road.

The position selected for a picquet may be occupied by the enemy or not. If occupied, it will nearly always be necessary for the picqueting

officer to take the orders of the advanced guard commander. A sufficient force can then be detailed, if necessary, in addition to the picquet, to seize the position, and establish the picquet on it, returning to the road when this is done. The advanced guard commander will decide whether this additional party should be supplied by the picqueting troops, or by the advanced guard. The advanced guard commander will decide whether to stop or not, till this party returns. It is quite possible that, when the enemy is driven off, the strength of the picquet may require reconsideration on the spot, so it is well, at first, to send a fairly strong one, with a British officer.

The picqueting officer gives the picquet commander a slip of paper, showing the serial number and strength of the picquet as well as the unit to which it belongs. He should also keep a record in triplicate of this. Every two or three miles, he should send one copy of such records to the officer with the red flag with the rear guard, and another to the leader, retaining one himself. The officer commanding the company, double company, or troop, supplying the picquet, should be present with the picqueting officer, and should also keep a record of the groups supplied by his own unit. To save time, it is well to have regular books of forms printed beforehand.

The picquet commander leaves a file with fixed bayonets on the road, at the point where the pic-

quet leaves it. He hands over to this file the slip of paper with the number and strength of the picquet on it. He then leads his picquet in proper formation to the locality pointed out, selects the exact position and entrenches. He must then think how he can best regain the road, when the distinguishing flag of the rear guard is opposite to him. Now it is quite probable that the way the picquet went to its station is not the best way to come down to join the rear guard. It is most advisable to join in at an angle to the road, as shown in Plan 16, as this delays the rear guard less, and protects it better than if it takes a line at right angles to the line of march, or one leading towards the rear. If the picquet commander is not quite sure from observation that such a retiring line exists, and is readily passable, he must send a file down to find out. The best line for retirement being settled, he must instruct his file on the road, which was posted with fixed bayonets, to move on to the place where his retirement line joins the road, and stay there. All this sounds somewhat trivial, but it is the neglect of such minor precautions which leads to the cutting up of picquets, or to the rear guards being seriously delayed and harassed. For example, (*vide* Plan 17) a picquet starts from A, and leaves a file there. It takes up its position at P. The commander sends a file to look for a path to descend, but it finds cliffs for a long way as shown. It finally discovers a path

down the cliffs, B, C. The file at A is transferred to C. Finally the picquet retires by B, C. If the path B, C had not been found, the picquet might have got hopelessly hung up in the cliffs, in trying to descend, necessitating the recapture of the position P by the rear guard, entailing great delay and, possibly, severe losses.

The file left by the picquet on the road at C reports to the responsible officer with the rear guard distinguishing flag, giving him the slip of paper with the serial number and strength of the picquet on it. This officer then takes steps to ensure that the rear guard waits for the picquet to join it.

When the picquet commander sees the red flag with the rear guard, he knows that it is time for the picquet to withdraw. The exact time for it to start is a matter of judgment. If too soon, the flank of the rear guard will be exposed, and, if too late, the rear guard will have to wait for the picquet, which is equally undesirable.

"A few men without exposing themselves must first slip away and get down the hill-side, while the remainder extend and thus lead the enemy to believe that the original number is still present; then more must retire in the same way, and, finally, those who are left to the last, who ought to be selected for their activity, must get down the hill as rapidly as possible, and in an open formation."* If the distance is considerable, the first men to

* Memorandum by Sir William Lockhard, dated 18-11-97.

retire will often have to take up a position some way back to cover the retirement of the men who remain till the last. As the number of men decreases, the intensity of the fire of the remainder should increase.

When originally posting the picquets, the picqueting officer may elect to leave a support, on or near the road, to back up any particularly exposed group of picquets. If the picquets are pressed heavily, and there is no special support already detailed, assistance may have to be sent to them from any part of the column, and it is the duty of commanders of units to do so, in cases of urgency, without waiting for further orders.

When nearly the whole of his command has gone on picqueting duty, the officer commanding a company, double company, or troop, remains on the road, keeping with him a couple of orderlies, a signaller, and if possible, a mounted orderly. If he can do so, he should go back, to opposite his first picquet, seeing that everything is correct, and he should then help all his picquets to come in. This may sometimes be impossible, as no one can be allowed to delay the whole column by forcing his way back along a narrow and crowded path. If he cannot get back the whole way, he goes as far as he can, and stops there till the whole of his picquets in rear come up, and he then acts according to circumstances, namely—remains with the rear guard, or presses on to the front again with his command.

The officer commanding the battalion or squadron, when the whole of his command has been used up, should halt on the road till the whole of his command arrives.

A large red flag should be carried by a man with the main guard of the rear guard to show picquet commanders when to start to come in. There are often large gaps in the column, and, unless the rear guard is thus indicated, picquets are apt to come in prematurely. It is well also to have a red lantern in case it gets dark before the march is finished. The flag should keep to the main track, so that the men left on it by the picquets may be sure of seeing it. So as not to hamper the commander of the rear guard with unnecessary duties, the leader should detail a special officer, from each of the battalions supplying the picquets, to remain with the red flag. This officer receives from the picqueting officer a record of the picquets which have been posted. The picquet files on the road also hand him their record. He checks each picquet as it comes in, and should be able to say at once if any picquet has been forgotten. He should carefully watch the rejoining of the picquets, so that aid may be given from the rear guard, if necessary. He must at once report to the commander of the rear guard if anything is wrong. It is found that picquets are less likely to go astray if the officer with the red flag belongs to the same battalion as they do. •

If the rear guard is pressed, its commander has the right to take all picquets coming in to reinforce the rear guard, but he must act with discretion, as picquets should ordinarily press on to the front again.

If the rear guard commander does not require reinforcement, picquets will be retained with the rear guard till a troop or company is collected. Should the baggage column be in a bad way, this unit may be retained there, otherwise it joins the tail of the fighting force, or sometimes it may be necessary to send it right on to the advanced guard.

For the purpose of foraging, blowing up towers, destroying villages, etc., it may be necessary to send a force out from camp for several miles, with orders to return before dark. In such a case picquets must remain in position till the force is safe past them on its way home to camp. Here the picquets have to be in position many hours, and will be out of supporting distance of the main body, hence they may have to be stronger than in the case of ordinary picqueting. Supports on the road, for important groups of picquets, are often essential. Each picquet must be warned to remain in position till the rear guard gets abreast of it on the way home. The file on the road should rejoin its picquet when the force has passed it on the outward march, coming back to the road again when the advanced guard comes abreast of the picquet on the homeward march. It is evident

that the position of this file on the road will not be the same as in the case of ordinary picqueting, but must usually be somewhat nearer camp than the picquet, so that that party may join the rear guard at a suitable angle. No red flag will be shown by the rear guard on its outward journey.

The flank protection of a column takes so many men, that it is generally impossible to make the advanced and rear guard as strong as we would like to do. When we adopt the method of using a special picqueting force with the advanced guard, it will generally be sufficient to allot half a battalion for that body, making the battalion commander the commander of the advanced guard. The rear guard will be automatically reinforced as the picquets come in, so that an original allotment of half a battalion is usually sufficient, though, when there is an immediate probability of severe hostile pressure on it, there should be a whole battalion. The rear guard will be under the battalion commander.

The position of the artillery is a matter of very considerable difficulty. Even during the advance into the enemy's country, the rear guard is very likely to be attacked, so we want some guns with it. We also require as many guns as possible in front, as the opposition may be strong there. No rule can be laid down. The state of affairs, as existing before the march begins, must be considered. Speaking generally, for the first march or two one section of artillery with the rear guard will be

sufficient. After that, if we have two batteries in the brigade, the strength with the rear guard should be increased. When retiring from a raid, or finally from the enemy's country, terms not having been made, the rear guard may expect a very hard time, and the bulk of the artillery should be with it. The artillery in front should, as a rule, be near the head of the main body. The advanced guard is so near the main body, that there is not much use having it there, especially as premature use of artillery is often most objectionable in this class of warfare. If, however, the enemy obstinately opposes the posting of the picquets, it may be advisable to send on two or more guns to the advanced guard, so as to avoid delay in picqueting.

In the advance, if the valley is at all an open one, cavalry can be used for reconnoitring ahead and for picqueting, so that most of it should be well forward with the advanced guard. It can be quickly sent to the assistance of the rear guard, if necessary. If the valley is narrow and the road bad, cavalry should be kept farther back with the main body, being sent on ahead when the valley broadens out again.

In the retirement down a broad valley cavalry will be very useful with a rear guard, and will add to the pace at which it can move, when harassed by the enemy. Some are required with the advanced guard to reconnoitre and do picqueting.

The cavalry might be divided equally between the two. In a narrow valley, with a bad road, it had best be placed with the main body.

Unless it is certain that the road is quite good, and bridges, where necessary, exist, the sappers should always be with the advanced guard, in advance or retreat. They should be in front of everything except the van guard. Any sappers left behind for a particular purpose should be pushed to the front again, as soon as possible. If there is fear of the rear guard being caught by darkness, and having to stay out all night, the sappers can, with advantage, be made to join the rear guard, and help with protective works, which will probably be very necessary.

Pioneers should be the foremost battalion, not for advanced guard or picqueting, but so that they may be handy for road-making when wanted.

It is most necessary to remember that different classes of infantry, British and Indian, have different characteristics, and have probably been trained on different types of ground. They should, therefore, be used for the class of work to which they are most accustomed. For example, it is most dangerous, when the position is at all critical, to detail a battalion for picqueting which knows little or nothing about such work. Such a battalion should not be detailed for a frontier campaign, but it frequently is.

The advanced guard can be very close to the

main body, as the tribesmen have no artillery. Half a mile to a mile is generally ample. It is sometimes advisable to start the advanced guard, with the special picqueting troops, a considerable time ahead of the main body, so that, if there is a particularly difficult piece of picqueting to be done, at the beginning of the march, this may not delay the main body.

The rear guard can follow immediately after the baggage. The retirement, when pressed by the enemy, should be by alternate fractions of the force. Each portion retires on, and passes some other portion, which has got into position previously, clearing the front when doing so, and, in turn taking up a position to cover the retirement of the portion left behind. The different sections of a battery act in a similar manner. As long as possible a reserve should be kept to meet unforeseen events. If it must be used up, a new reserve should be formed from the incoming picquets. Those of the enemy following up the incoming picquets are often far more dangerous than those in the valley, and it is against them that the artillery will frequently have to fire, denying a commanding point to the enemy, after it has been abandoned by a picquet. If the enemy is pressing the rear guard badly, and the ground is at all favourable, a cavalry charge will often have a most salutary effect. In a broad valley it is advisable to make the cavalry work on the flanks, to save the infantry from being

too much spread out in endeavouring to prevent the enemy getting round them. The rearmost line should not be allowed to get fixed, and there should be no hanging on to positions when there is no necessity for it.

The great difficulty with rear guards has always been the removal of the dead and wounded. Bringing in the dead is a matter of sentiment, and, no doubt, we should do so when it does not delay matters seriously. It must be a very bad state of affairs to justify the abandoning of the wounded, as it means nearly certain death, possibly under horrible conditions. There does, however, come a time when the rear guard is so hardly pressed that to persevere in an attempt to remove the wounded would mean the annihilation of the entire rear guard. If proper arrangements are made by commanding and medical officers, much can be done to facilitate the removal of the dead and wounded. Stretchers with proper bearers are very scarce. To carry a man in a blanket stretcher, for any distance, requires the services of four fighting men. Wounded soldiers can be carried on other men's backs only for a few hundred yards. But two out of every three men can perfectly well ride on a mule or horse. It may hurt them, but this is unavoidable, as we desire to save their lives. Hence ambulance riding mules, in addition to the available stretchers, must be with the rear guard in strong numbers, and keep as near to the

fighting line as possible. Camels with hospital kajawahs* should be kept a little farther back, so that the dead or wounded may be transferred to them. If no riding mules are available, cavalry men should be dismounted and their horses used. There should always be one, or better two, medical officers with a rear guard. A really practical and energetic medical officer can assist the smooth working of a rear guard in an extraordinary degree.

The protection of troops, when at rest, may be conveniently divided into two parts, namely, the arrangements within the camp, and those which are adopted outside the defensive perimeter of the camp.

The first consideration, in selecting a site for a camp or bivouac, is that it does not require an excessive expenditure of troops for the outside defensive arrangements. Picqueting a camp is an excessively trying and dangerous work. If more than four companies have to be sent out as picquets, with a mixed brigade, the site may be said to be a bad one from this point of view. The next point is that there should be a good field of fire from the perimeter of the camp. Apparently level areas are frequently intersected by deep depressions, and, when these lie within a short distance of the perimeter, they are particularly dan-

* A litter in which a man can recline. Two of these can be carried by a camel.

gerous, as they form admirable places for the tribesmen to collect in during darkness, prior to a rush on the camp. It may often be better to place a camp close in under the hills on one side of the valley, than to place it in the centre of the valley. In the former case, the near hills can be strongly held, and defilade the camp from distant sniping on that side, while the hills on the other may be sufficiently distant to render sniping from them innocuous. In the latter case, the camp may be commanded from a great many heights within rifle range. Other considerations are that the actual camp site should be fairly level, near water, and some distance from villages. Recently irrigated fields should be avoided for sanitary reasons, and it is always advisable to avoid the dry beds of rivers, for we cannot say when a flood is going to come down them, being often the result of rain many miles away. The high bank overlooking the river bed is a very good line for one or more faces of a camp, as it affords a good field of fire, and when such high banks form a promontory, the position may be very favourable.

The distribution of troops within the camp is of great importance. It will, of course, depend on the existing conditions, but the following general rules are applicable in most cases :—

(a) There is no reason why cavalry should not have a piece of the perimeter to entrench and defend, though it should not be given too much by

placing it at a salient. It should be on one of the least exposed faces.

(b) Artillery entrenches very well, but there are not, as a rule, very many men available to do so. The portion of the perimeter allotted should be enough to allow of all guns being brought into action, and it should be where guns are likely to be of most service at night. The flanks of artillery should be protected by infantry.

(c) Sappers and miners should be on the perimeter, though not at a salient. They are generally hard at work outside the camp till a late hour, and should not be given too much of the perimeter to entrench.

(d) Supply, ordnance, medical and staff units should not be on the perimeter. The staff should be centrally situated on the main road. Hospitals should be on the best and safest site.

(e) After deducting the amount of perimeter occupied by cavalry, artillery and sappers, the remainder should be divided among the infantry battalions, in proportion to their strength. A marked salient should not be the dividing line between two battalions. Divided responsibility, at such an important point, is most inadvisable. If a camp is only going to be occupied for one night, a deduction of space and perimeter should be made for the battalion which supplies the picquets. If the camp is to be used for several nights, full spaces and shares of perimeter must be allowed, as the

picqueting duty will be changed daily. Measures will have to be taken to send some companies from another battalion to bivouac on the site of a battalion supplying the picquets, so as to help to hold its portion of the perimeter. Assistance will also have to be given to it in entrenching.

The spaces allotted to units, though of sufficient area, will often be most irregular in shape, especially in the case of infantry, on which the duty of defending most of the perimeter necessarily falls. Consequently, any stereotyped form of bivouac or camp is absolutely impossible, and units must adapt themselves to the space allotted as they best can, conforming at the same time, as far as possible, to the following rules :—

(a) Companies told off for the general reserve should not camp on the perimeter, but as near the main road as possible.

(b) A battalion reserve should be centrally placed, within the battalion area, and not on the perimeter.

(c) In each of the other companies of a battalion three sections should be as close to the perimeter as possible.

(d) The remaining section should be inside the rest, forming a company support.

(e) All officers must sleep with their companies, and the battalion staff with the battalion reserve.

(f) No cavalry, artillery or sappers will usually be told off to the general reserve, but, in other re-

spects, these arms will camp or bivouac on similar principles, enough men being placed near the horses and mules, so as to hold them and prevent a stampede

(g) The quarter guards should be near the perimeter.

A point, on which there is always a great difference of opinion, is whether the ditch of the perimeter defence should be outside or inside the parapet. If outside, it constitutes an obstacle to the rush of the enemy at night. If inside, the cover from fire to the defenders of the perimeter is better. The tribesmen prefer to attack camps by night. Their form of attack is a surprise rush of men armed with swords, usually covered by fire from some other quarter. Such fire at night will be wild and unaimed. On ordinary ground and under ordinary conditions no parapet, that we can erect, will do much as regards defilading the camp. The real danger is not the fire. It is the rush, and the terrible confusion which may ensue when that rush penetrates into the camp. A man standing at the bottom of a ditch may be somewhat safer from fire than a man kneeling on the ground level, behind a parapet, as he is more apt to be hit by reverse fire, though little more by direct fire. Standing in a trench, however, he is at a great disadvantage, if the rush gets home or nearly so. A man standing in a ditch cannot see nearly as well, as there will always be small hollows

to the front. If nothing stops the rush, and the parapet is gained, it will be difficult for the defender to use his bayonet. If the trench is outside, it certainly helps to stop the rush, and the defenders, if necessary, can get on to the parapet, and use their bayonets against the enemy, who is struggling up it. Officers, too, can move about much more freely. Taken all round, the outside ditch seems to be better than the inside one against the ordinary rush at night.

Night attacks have taken place and will take place again, but they are not a matter of very frequent occurrence. What we have to put up with constantly on service is sniping at night, and it takes a long time to get accustomed to it. Protection against sniping can only be secured by défilading our own sleeping place, either by hollowing it out, or building stones and earth round it. A slight amount of labour expended on this will often give a feeling of security and content, which is conducive to sleep, though the amount of real protection is probably extremely small.

Generally, it will be sufficient if the parapet on the perimeter is made high enough to give cover to men kneeling, though it may be made of any height and thickness, if we are occupying the camp for some time. If time is available, some traverses are a good thing, but in a camp, which is only used for a single night, they can seldom be made.

Entrances should be covered by an advanced trench. Salients should be blunted.

If the time at our disposal is very short, or the men exhausted, it may not be possible to construct substantial parapets, but it is always necessary to make a distinct line which everyone can see, and on which they can "fall in," on the alarm. Saddles, bags of supplies, in fact anything, is better than having nothing at all.

If there are thorn bushes about, a zareeba, just outside the ditch, is a very nasty obstacle to a rush, and does not require much labour. Sometimes a few strands of barbed wire will prove very useful, but this can seldom be carried, and is generally confined to permanent camps, such as those on the lines of communication.

There are many expedients for lighting up the ground round a camp, but probably the best method is the use of star shell by the artillery.

A staff officer should point out to unit commanders the exact portions of the perimeter which they must defend. This is most necessary, as there are bits of the perimeter, such as entrances and unoccupied places, where hollows run up into camp, which do not naturally fall to anyone's share.

A general reserve will always be formed, and it should consist of two companies from each of the battalions not doing picquet duty, nor supplying men to help to guard the portion of the perimeter

occupied by the picqueting battalion. On the alarm sounding, the reserve companies fall in, as quickly as possible, with fixed bayonets, and double to the place of assembly laid down, which will generally be the centre of the camp, on the main road.

Each battalion should have a reserve of one or two companies, and each company, on the perimeter, one section. A useful precaution is to have one section of each perimeter company actually sleeping on the perimeter, not under tents or bivouac shelters. There should be a sentry every forty or fifty yards along the perimeter.

A brigade should be made to occupy its alarm quarters, so as to ensure that everyone knows his proper post.

No one should be allowed to enter the camp except members of the force. It used to be laid down that the political followers should have a separate camp. This is frequently quite impossible, as even political followers have a right to full protection. Probably the best solution of the difficulty is to make them a kind of horn work to the main camp, detailing a guard for it. All jirgas* and individual tribesmen should be interviewed by the political officers well outside the camp.

The main road should run straight through the middle of the camp, and should be twenty yards

* A party of tribal representatives.

wide. Each unit should be separated from its neighbours by a road ten yards wide, while every unit on the perimeter should have its own exit from the camp. Between the perimeter and the ground occupied by the troops there should be a clear space of ten yards, in order to facilitate communication, to allow of men falling in quickly, and to permit of the rapid movement of reinforcements to points requiring them.

The advanced guard commander is responsible that the site, selected for the camp, is properly picqueted, as a temporary measure. For this he can use what remains of the picqueting troops, specially detailed for the march, as well as the troops forming the advanced guard. These together will generally be ample for the purpose. This temporary picqueting is carried out in the same manner as that during the march. Under protection of these picquets the surrounding ground should be carefully examined by the leader, or an officer or officers detailed by him, and positions for the permanent camp picquets should be fixed. The first battalion of the main body to arrive in camp should usually be the one to supply the permanent picquets, so that there may be time for the men to have a meal and a rest, before proceeding on picquet duty, and so that they may arrive at their posts in time to entrench before it is dark. If the force is moving on next day, it will nearly always be advisable to take all the picquets

from a single battalion. One battalion will have done the camp picqueting the night before, one will have supplied the troops for picqueting during the march, and one will have formed the advanced and rear guards. When a force occupies a camp for some time, it may be expedient to detail the camp picquets from several battalions, but even then it disorganises several units instead of one, makes a sound system of inspection difficult, and leads to a great deal of possible mutual recrimination if anything goes wrong. Although picquets, when the force is at rest, enjoy a great deal of independence, there must be a certain amount of co-operation between them, which is much harder to ensure when they come from different battalions. An exception to this rule may be made when some of the picquets are very near the camp, as for example, when the force is placed close under a hill or ridge, so as to defilade it. Here it may be absolutely necessary to reinforce these picquets even at night. The hill or ridge really constitutes one of the faces of the camp, and, if taken by the enemy, would not only be disagreeable, but possibly disastrous. The battalion on that face of the camp should, therefore, supply these particular picquets, and reinforce them if necessary.

The primary object of the picquets is to prevent the tribesmen from occupying the surrounding hills by small parties, so that they can fire into the

camp, or in force, so that they can seriously harass the brigade while still in very close formation, from which it must deploy before it can attack them. The importance of this object has greatly increased of late years with the improved armament of the tribes. A secondary object is to detect any attempt of the enemy to bring large numbers close up to the camp, so as to rush it. If the tribesmen wish to do so in great strength, their best chance of success lies in surprise, so they are hardly likely to commence operations by attacking the picquets. Success in annihilating a picquet or two is no doubt gratifying, but the number of rifles, and the amount of ammunition, thus secured will not be sufficient to reward all the individuals of the large mass of tribesmen which must be used for the effort, which will generally prove very costly. It is probably this reason which justifies us in exposing small isolated bodies, such as picquets, to a danger which is so serious that the whole force has to make most careful arrangements to resist it, within an entrenched camp. As a matter of fact, though camps have been rushed on a good many occasions, with partial success, the annihilation of well posted picquets, of a respectable size, has not been very frequent.

In ordinary warfare protection at rest is secured by a fanlike disposition of the forces employed. The whole defence is essentially mobile, and observation is ensured by cavalry and infantry patrols,

and by sentry groups, which are detached considerable distances from the picquets. Though it would be wrong to deprive picquets by day of all their mobility, it has been found by experience that movement during the night, in a mountainous country, when opposed to tribesmen, involves too much danger to be admissible in the case of ordinary troops, which are no match for their opponents in this class of work. All idea of a fighting retirement, or of moving up reinforcements, must be abandoned. Bodies employed in protective work must remain, and fight it out where they are. There is thus no advantage in employing supports and reserves for the picquet line, and we are forced to adopt a cordon system. The tribesmen are particularly skilful in stalking small detached parties at night, and experience shows that isolated patrols and sentries have very little chance against them, and, therefore, that they can only be employed under very exceptional circumstances. Hence, we cannot make any detachments from a picquet, and its powers of observation become extremely limited.

In regular warfare we are nearly always able to judge fairly accurately the directions in which there is most danger, and to make a disposition of the protective forces, so that they are strong in some directions, and weak in others, but in this class of hill warfare the distances involved are so small, wide reconnaissance so impossible, and the

tribesmen so mobile, that there is almost equal danger from every direction, and the camp must usually be protected all round by picquets.

The position of the picquets should command the ground from which the enemy can obtain a good view of the camp, and can fire at it with effect. For this purpose it will very seldom be necessary to place picquets more than about 1,500 yards from the perimeter of the camp. Where the hills, that are close to the camp, defilade it from the ones further off, the distance of the picquets may be very short. A rough average distance may be said to be about half a mile, so that the picquet line may easily be as much as four miles long. If the strength of the picquets varies from a section to a company, and we keep some men for picqueting the lower ground, as will be explained later, we can, with half a battalion, have our outside picquets about half a mile apart on an average. It is a mistake to multiply the picquets, so as to avoid every possibility of the camp being sniped by a few men from long distances. Picquet duty is extremely trying, and we are likely to lose more men through overexertion and exposure than from a few stray shots, which fall into the camp.

Although we may be justified in sending out picquets, the danger to which they are exposed is very great, unless they are in positions favourable for defence. The tribesmen do not like attacking

up a steep hill, and there is little doubt that the strongest position for a picquet is on the top of a hill, where it is not commanded from any other height, within rifle range. Such a position will usually give it a good field of fire over ground which can be used for firing into camp, but it will be generally unsuitable for watching the depressions, by which the tribesmen will move when they seek to approach the camp, with the object of rushing it. Occasionally a point may be found overlooking such a line of approach, which is suitable for a picquet, but this is not common. To place picquets in such depressions, is to expose them to almost certain destruction, and this cannot be justified under any ordinary circumstances. It is very seldom that we can disguise the positions of strongly posted picquets from the tribesmen, so that they will not have very much difficulty in getting through them, at night, unobserved. The existence of strong picquets is, however, a distinct deterrent against any plan for rushing the camp, as the enemy has to leave them behind him in his approach, and they may prove extremely disagreeable to him, if he is defeated and has to retire again, possibly by daylight.

Their isolation, and the long time they may have to hold out without any support, make it necessary that these picquets should be stronger than the parties which protect the flanks of a column on the march. Their strength will vary directly with

their importance, their isolation, and the weakness of their position from a defensive point of view. They will vary from a section to a full company, and, when important, must be under the command of an officer. Picquets of over half a company will be rare. They must be well supplied with water and ammunition. They must have the means of signalling to the camp, both by day and night. They must strengthen their position by every available means, to the greatest extent that is possible in the time available, and they must be prepared for attack from every side.*

This outer ring of picquets cannot prevent the tribesmen getting through it, especially at night, and occupying favourable positions nearer camp so as to fire into it. Such fire from ground, approximately level with the camp, will have little effect, but low hills and ridges may sometimes afford the tribesmen good places to fire from. These must often be picqueted on similar principles to the outer ring of hills. Such picquets may be able to give warning, if the tribesmen endeavour to form up behind the feature on which they are posted, so as to rush the camp. If the ground is fairly level round a camp, but intersected by small ravines, which is frequently the case, it is very difficult to make arrangements so as to

* The usual method is to build up rough stone walls, called sangars, enclosing the picquet on all sides, and defilading the interior, not only from the enemy's fire, but from stray bullets from the camp.

detect any hostile gathering for a rush. Picquets on open, level ground have little chance of escaping destruction, even if strongly sanged. Sometimes solidly built houses, enclosures, or towers exist at a short distance from the camp, and picquets, placed within these, may be safe from a hostile rush, and from the fire from the camp. Where there are no such strongholds, and there is dead ground near the camp, on which the tribesmen can collect, probably the best thing to do is to increase the readiness of the perimeter defence, by making more men sleep on that portion which is nearest the dead ground, but camps with this disadvantage should be avoided if it is possible. Specially selected men, preferably volunteers, might be sent out from camp to examine such ground occasionally, but the risk they run is very great.

It has been found advantageous, on occasions, to employ small surprise parties of very active hillmen, well trained in such work, to go out from camp, and stalk any particularly enterprising sniper or snipers, but very careful precautions have to be taken to prevent their being fired on by their own men when returning to camp.

All picquets should be relieved at least once during the twenty-four hours, and this should be done at such a time that the whole of the relief procedure takes place during daylight.

When the force marches, the rear guard com-

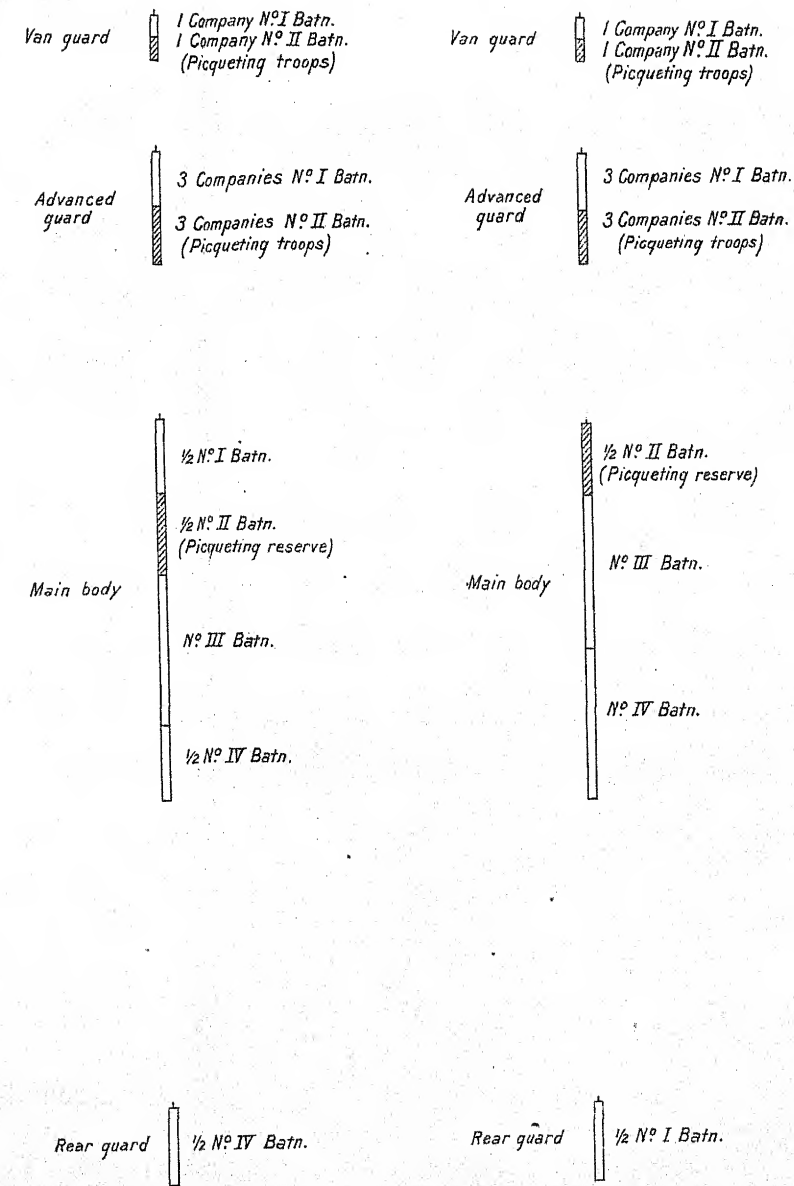
mander is responsible that the picquets are relieved from the troops told off for the rear guard. The relief should start from the camp at day-break, so as to give the relieved troops time to join their own battalion before it starts. It is not generally necessary that the relieving troops of the rear guard should be as strong as the picquets.

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PLAN II.

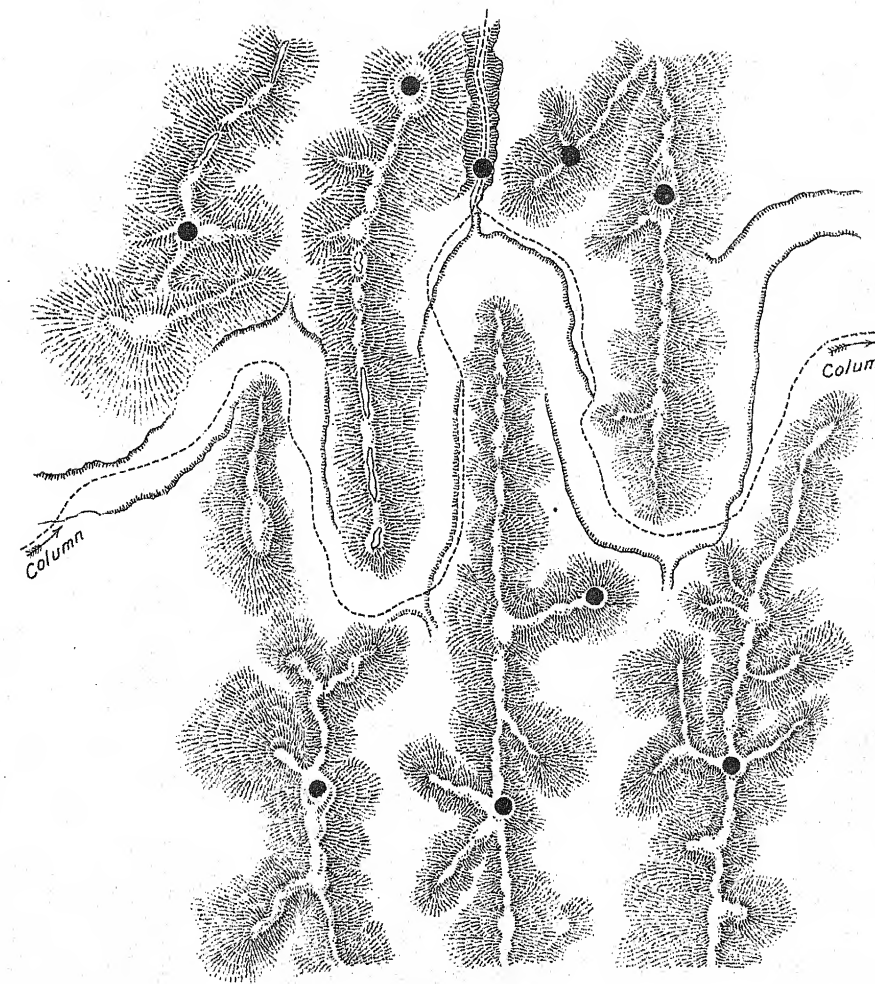
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Note:-
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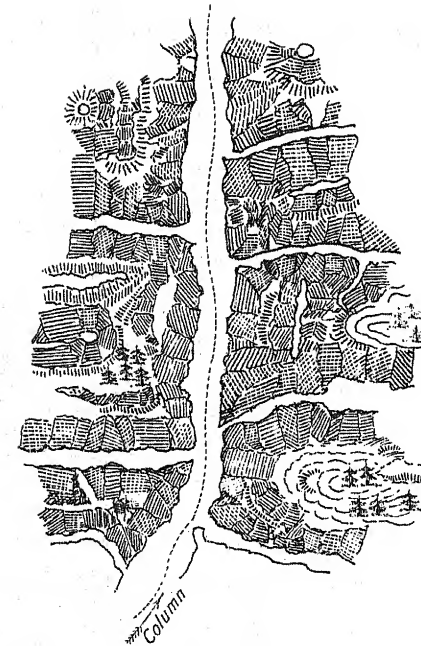


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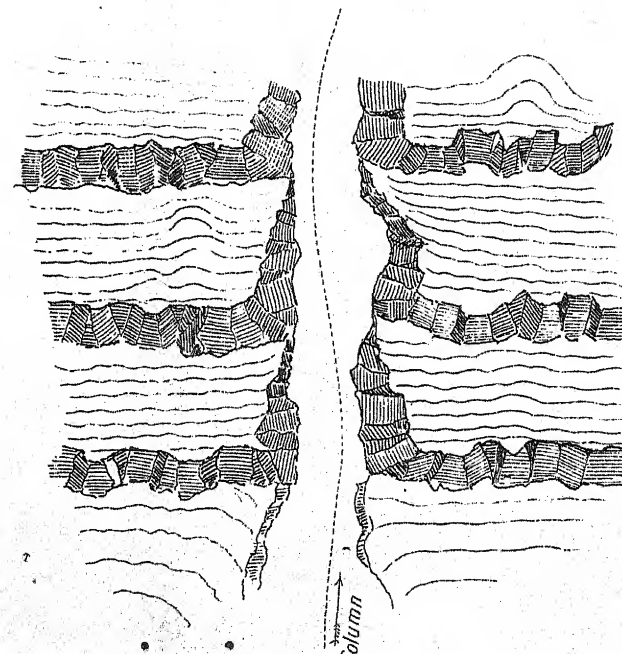
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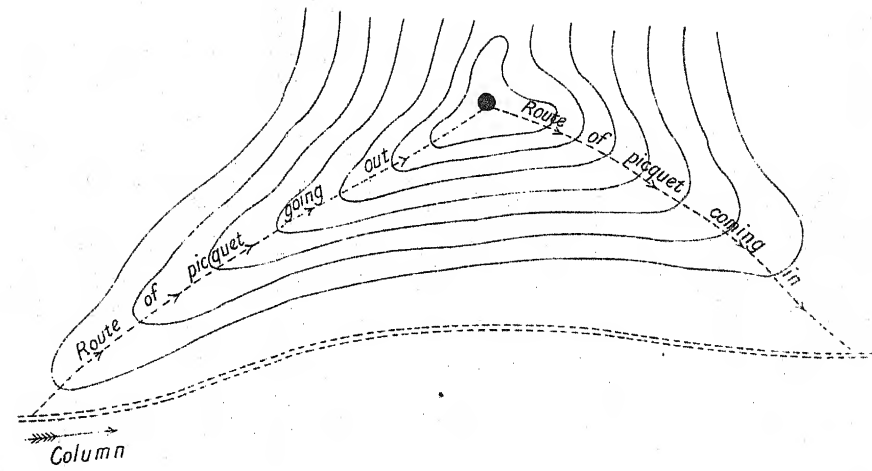
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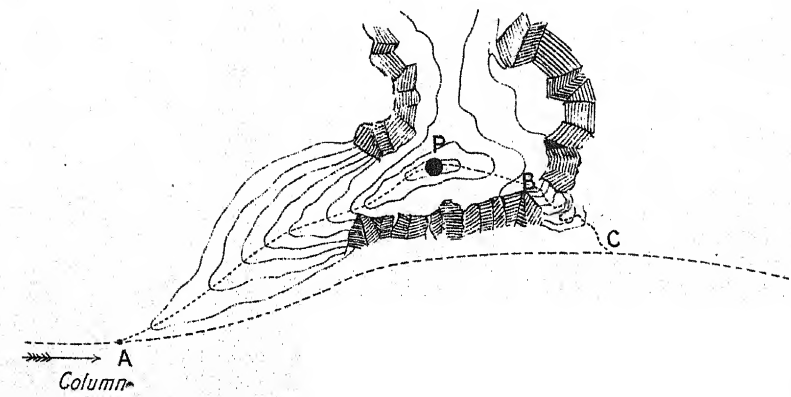
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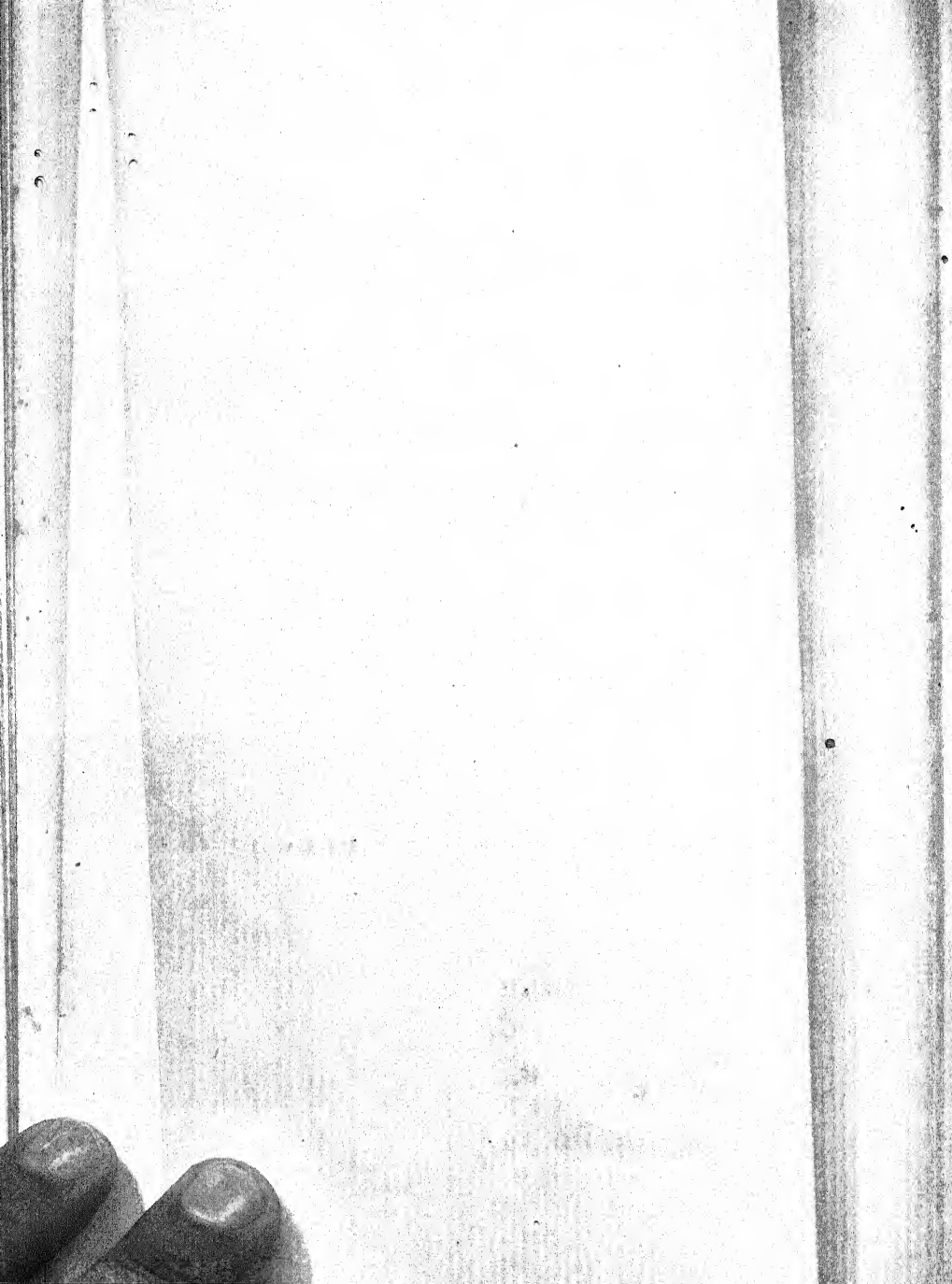


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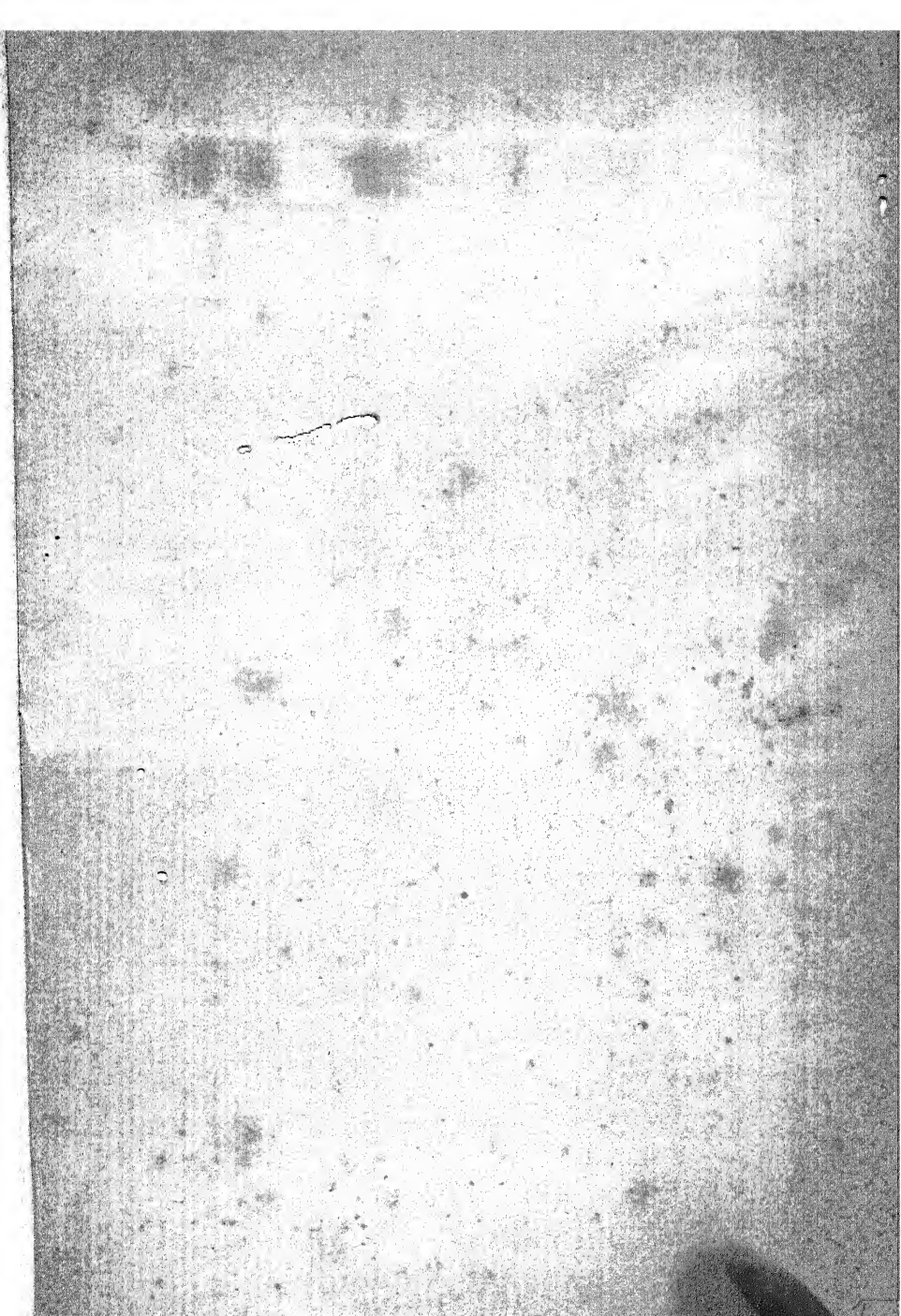
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